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Intermec

User's Guide

EasyCoder PF4i Bar Code Label Printer

(IPL Version)

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EasyCoder PF4i Bar Code Label Printer

(IPL Version)

IntermecTechnologiesCorporation

WorldwideHeadquarters
600136thAve.W.
Everett,WA98203
U.S.A.

www.intermec.com

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Before You Begin

This section provides you with safety information, technical support information, and sources for additional product information.

Safety Summary

Your safety is extremely important. Read and follow all warnings and cautions in this document before handling and operating Intermec equipment. You can be seriously injured, and equipment and data can be damaged if you do not follow the safety warnings and cautions.

Do not repair or adjust alone

Do not repair or adjust energized equipment alone under any circumstances. Someone capable of providing first aid must always be present for your safety.

First aid

Always obtain first aid or medical attention immediately after an injury. Never neglect an injury, no matter how slight it seems.

Resuscitation

Begin resuscitation immediately if someone is injured and stops breathing. Any delay could result in death. To work on or near high voltage, you should be familiar with approved industrial first aid methods.

Energized equipment

Never work on energized equipment unless authorized by a responsible authority. Energized electrical equipment is dangerous. Electrical shock from energized equipment can cause death. If you must perform authorized emergency work on energized equipment, be sure that you comply strictly with approved safety regulations.

Safety Icons

This section explains how to identify and understand the warnings, cautions, and notes that are in this document. You may also see icons that tell you when to follow ESD procedures.

A warning alerts you of an operating procedure, practice, condition, or statement that must be strictly observed to avoid death or serious injury to the persons working on the equipment.

A caution alerts you to an operating procedure, practice, condition, or statement that must be strictly observed to prevent equipment damage or destruction, or corruption or loss of data.

This icon appears at the beginning of any procedure in this manual that could cause you to touch components (such as printed circuit boards) that are susceptible to damage from electrostatic discharge (ESD). When you see this icon, you must follow standard ESD guidelines to avoid damaging the equipment you are servicing

- **Note:** Notes either provide extra information about a topic or contain special instructions for handling a particular condition or set of circumstances.

Global Services and Support

Warranty Information

To understand the warranty for your Intermec product, visit the Intermec website at www.intermec.com and click **Service & Support**. The Intermec Global Sales & Service page appears. From the Service & Support menu, move your pointer over **Support**, and then click **Warranty**.

Disclaimer of warranties: The sample code included in this document is presented for reference only and does not necessarily represent complete, tested programs. The code is

provided “asiswithallfaults.” Allwarrantiesareexpressly disclaimed,includingtheimpliedwarrantiesof merchantabilityandfitnessforaparticularpurpose.

Telephone Support

TheseservicesareavailablefromIntermecTechnologies Corporation.

Service	
OrderIntermec products	
OrderIntermecmediaOrderprinterlabelsandribbons.	
Orderspareparts	
TechnicalSupport	
Service	
Servicecontracts	• Renewacontract. • Inquireaboutrepairbillingor otherserviceinvoicing questions.

OutsidetheU.S.A. andCanada,contactyourlocal Intermecrepresentative.Tosearchforyourlocal representative,fromtheIntermecwebsite,clickAboutUs >ContactUs.

Service Location Support

Forthemostcurrentlistingofservicelocations,onthe Intermecwebsite,clickSupport>ReturnsandRepairs> RepairLocations.

For technical support in South Korea, use the after service locations listed below:

AWOO Systems
102-1304 SK Ventium
522 Dangjung-dong
Gunpo-si, Gyeonggi-do Korea, South 435-776
Contact: Mr. Sinbum Kang
Telephone: +82-31-436-1191
E-mail: mjyun@awoo.co.kr

IN Information System PTD LTD
6th Floor
Daegu Venture Center Bldg 95
Shinchun 3 Dong
Donggu, Daegu City, Korea
E-mail: jmyou@idif.co.kr or korlim@gw.idif.co.kr

Outside the U.S.A. and Canada, contact your local Intermec representative. To find your local representative, from the Intermec website, click **Contact**.

Who Should Read This Manual

This User's Guide provides you with information about the features of the Easy Coder PF4i printer and how to install, configure, operate, maintain, and troubleshoot it.

Related Documents

The Intermec website at www.intermec.com contains our documents (as PDF files) that you can download for free.

1 To download documents
2 Visit the Intermec website at www.intermec.com.
3 Click **Support** > **Manuals**.
4 In the **Select a Product** field, choose the product that you want to download documentation for.

To order printed versions of the Intermec manuals, contact your local Intermec representative or distributor.

1 Introduction

ThischapterintroducestheEasyCoderPF4iprinterandcovers thefollowingtopics:

- DescriptionofEasyCoderPF4iprinter
- Safetysummary
- Productidentification

Description of EasyCoder PF4i Printer

TheEasyCoderPF4iprinterisamedium-dutydirectthermal/thermaltransferprinterwithaprintheadresolutionof8dots/mm(203dots/inch)andamaximumprintwidthis104mm(4inches).

TheEasyCoderPF4iprinteroffersalargenumberofusefulfeatures:

- FlashmemorySIMMsforfirmware,fonts,barcodes,andapplicationprograms
- Built-inCompactFlashmemorycardadapterforfirmwareupgrading
- Built-inRS-232interface
- ProvisionforextrainterfaceboardsincludingwiredandwirelessEasyLANconnections
- Keyboardanddisplaywithbacklightforimproveduserinterface.s

Alargenumberoffactory-installedorfield-installableoptionsareavailable,sotheprintercanbeconfiguredforawiderangeofapplications.SeeChapter7, “Options” onpage67formoreinformation.

TheEasyCoderPF4iprinterdescribedinthismanualsupportstheIntermecProgrammingLanguage(IPL)v2.30orlater.TheEasyCoderPF4iprinterthatsupportsIntermecFingerprintisdescribedinitsownUser’sGuide.

Safety Summary

IntermecassumesnoresponsibilityregardingtheCEDirectiveif theprinterishandled,modified,orinstalledinanywayother thanthatdescribedinIntermec’smanuals.

- Readthismanualcarefullybeforeconnectingtheprinter.
- Movingpartsareexposedwhenthesidedoorsareopen,so ensurethatthedoorsareclosedbeforeyouoperatetheprinter.
- Donotremovetheleft-handcover.Dangerousvoltage!
- Donotremovethebottomplate.Dangerousvoltage!
- Donotputyourfingersinsidetheprintmechanismwhenthe powerison.
- Placetheprinteronanevensurfacewhichcansupportits weightofapproximately7to8kg(15.5to17.7pounds)plus supplies.
- Donotspraytheprinterwithwater.Ifyouareusingahoseto cleanthepremisesinanindustrialenvironment,removethe printerorprotectitcarefullyfromsprayandmoisture.
- Carefullyreadthewarningtextontheenvelopebeforeusinga cleaningcard.

Product Identification

Themachinelabelisattachedtotheprinter’srearplateand containsinformationontype,model,andserialnumberaswell asACvoltage.Italsocontainsregulatoryagencymarkings indicatingcompliancewithorapprovalbyspecificagency regulations,ifany.

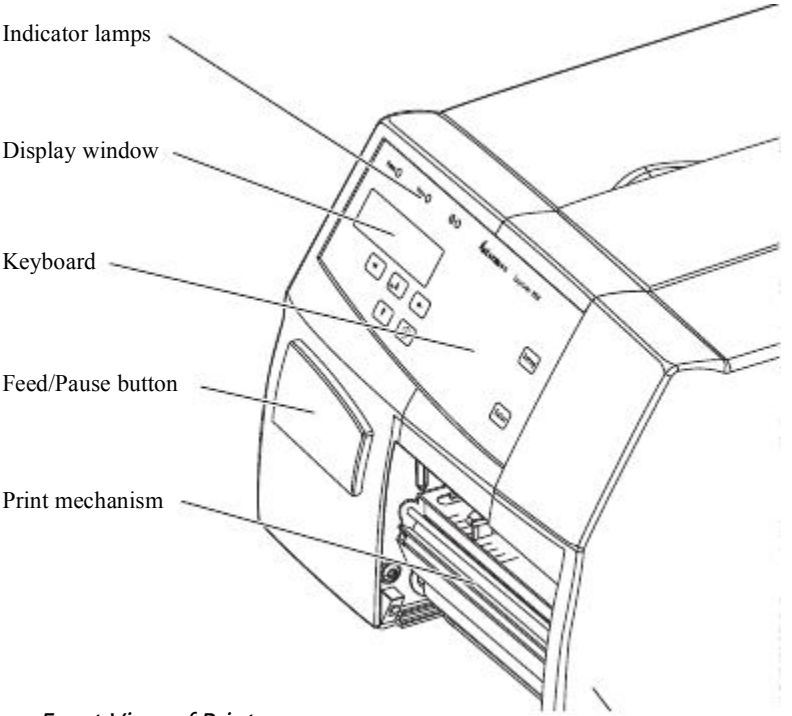
2 Installation

ThischapterexplainshowtoinstalltheEasyCoderPF4iprinter andalsodescribestheprinter’svariouspartsindetail.Itcoversthe followingtopics:

- Partsontheprinter’sfront
- Partsontheprinter’srearplate
- Partsinthemediacompartment
- Partsintheprintmechanism
- Connectingtotheprinter
- Usingthecontrolsandunderstandingtheindicators
- Switchingontheprinter

Front View

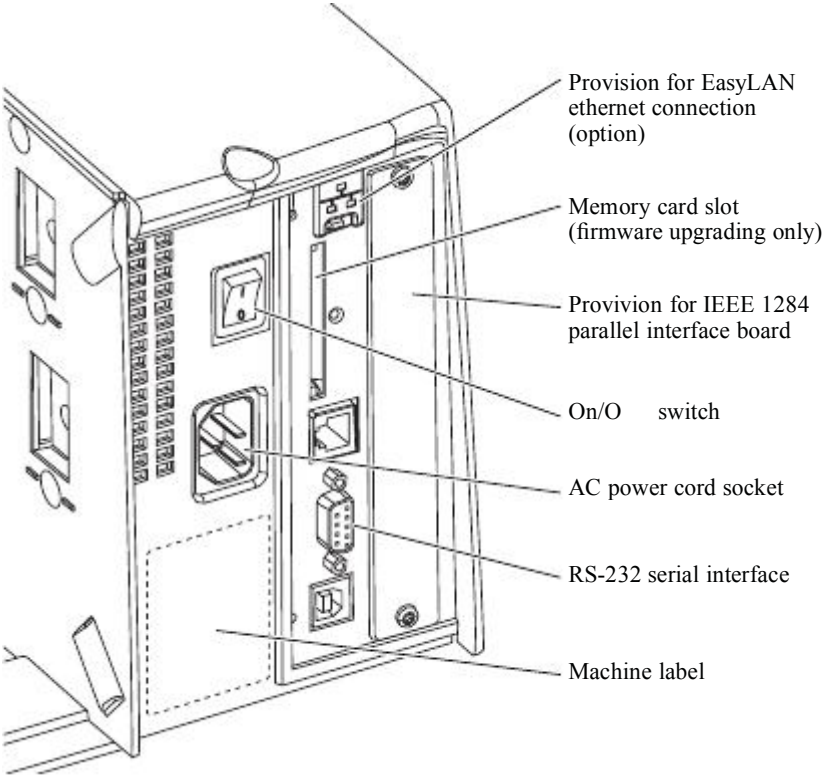
At the front of the printer are the display window, the indicator lamps, and the keyboard. These features allow the operator to control and set up the printer manually. Printed labels, tickets, or tags are presented at the front of the print mechanism. Refer to Chapter 7, “Options” on page 67, for information on possible optional devices that can be fitted on the printer’s front.



Front View of Printer

Rear View

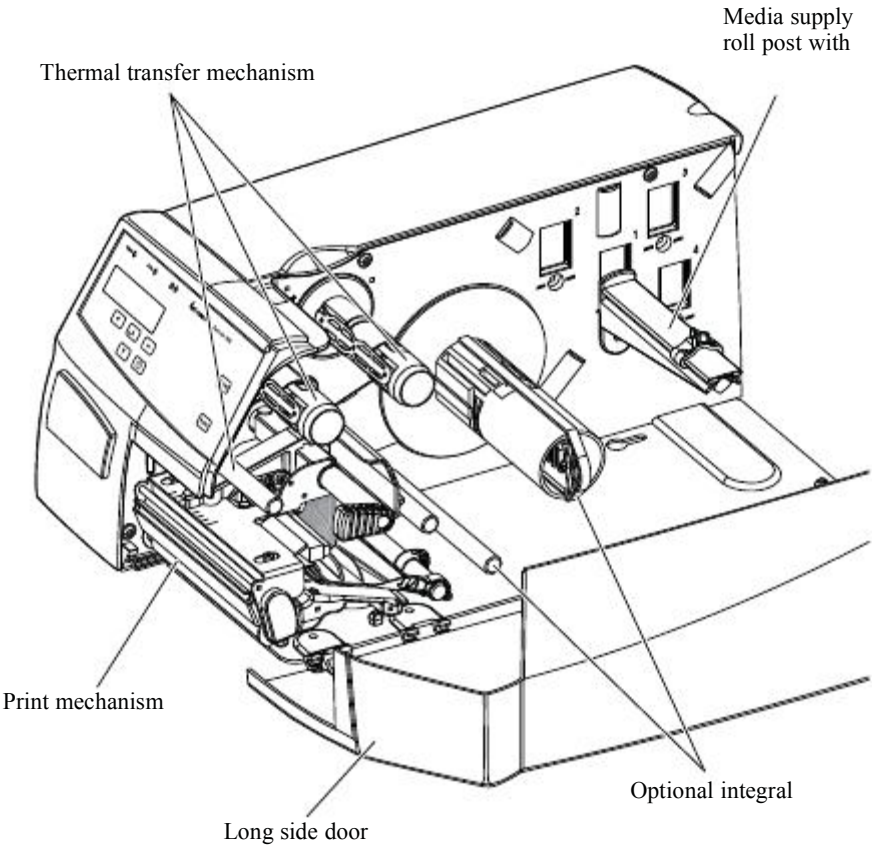
TherearplatecontainstheOn/Offswitch,theACpowercord socket,andvariousinterfaceconnectorsandslots.


Provision for EasyLAN ethernet connection (option)
Memory card slot (firmware upgrading only)
Provivion for IEEE 1284 parallel interface board
On/O switch
AC power cord socket
RS-232 serial interface
Machine label

Rear View of Printer

Media Compartment

Themediacompartmentiscoveredbyalongsidedoorthat completelyenclosestheprintmechanismandmedia compartment,orashortsidedoorthatonlycoverstheprint mechanismandgiveseasyaccesstothemediastock.Thedooris heldbyamagneticlock.Itcanbeopened180° toprovidefull accesstothemediacompartment.



Media Compartment

Themediacanbesuppliedfromarotatinghuborfroman externalsupplyoffan-foldedmediabehindtheprinter.Thereis alsoanoptionalrotatingmediasupplyhub.Formore information,seeChapter7, “Options” onpage67.

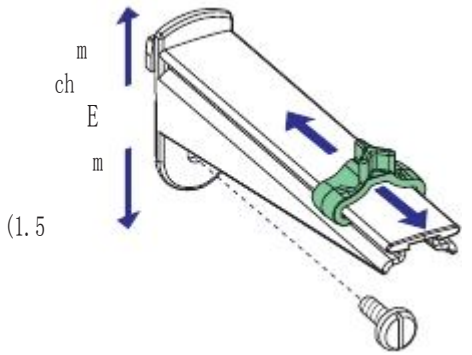
Media Supply Roll Post

TheEasyCoderPF4iusesamediasupplyrollpostthatcanbe fittedinthreedifferentpositionsinsidethemediacompartment. Thepositiondependsonthetypeofsidedoor(longorshort)and whetherornottheprinterisfittedwithanintegrallinertakeup. Alternatively,anexternalmediasupply(forexampleaboxoffan-foldedtickets)behindtheprintercanbeused.Arotatingmedia supplyhubisalsoavailableasanoption,seeChapter7, “Options” onpage67.

Tomovethepost toadifferentslot;removethescrew,twistthe postaquarterofaturn,andpullitout.

Tofitthepost;rotateitaquarterofaturn,insertitintothe appropriateslotinthecentersection(seenextpage),andtwist backsothelipsengagethecutoutsinthesidesoftheslot.Move itup(largecore)ordown(smallcore)asfarasitgoesandsecure itwiththescrew.

Themediasupplyrollpostfitsboth38-40mm(1.5inches)and 76mm(3.0inches)coressinceitcanbemovedverticallyinthe slotinthecentersection.Thebottompositionisintendedfor smallcoresandthetoppositionisforlargecores.Thepostis lockedbyastraight-slotscrewandhasamoveableedgeguideto fitvariousmediawidths.

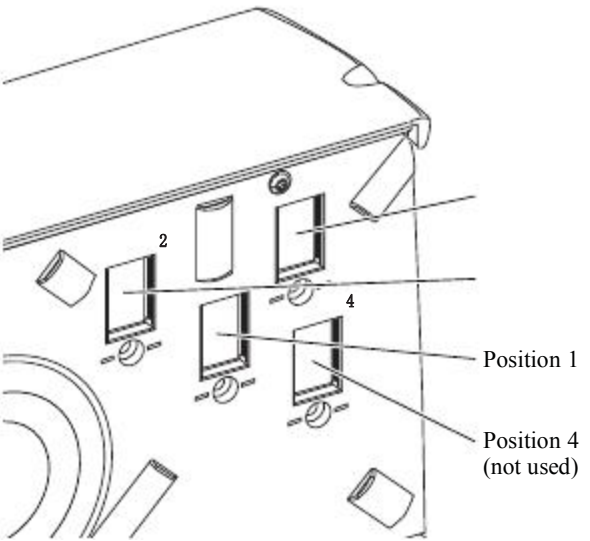


- **Note:** Makesuretoadjustthepositionofthepostaccordingto thesizeofthemediarollcore.Whenthepostisfittedinthetop position,theheadofthescrewwillinterferewithsmall(38mm/ 1.5inches)cores,causingmediamisalignment.

Media Supply Positions

Therearefoursetsofslotsandthreadedholesintheprinter’s centersectionforthemediasupplyrollpostorrotatinghub (optional).Theseslotsallowthelargestpossiblerollsizetofit, giventhelimitationsofanylinertakeupunitand/orthefull enclosureprovidedbythelongsidedoororMegatop.The positionsareindicatedbynumbersengravedinthecenter section.Theprintercanalsouseanexternalmediasupplylocated behindtheprinter,unlessithasanoptional8-inchMegatop

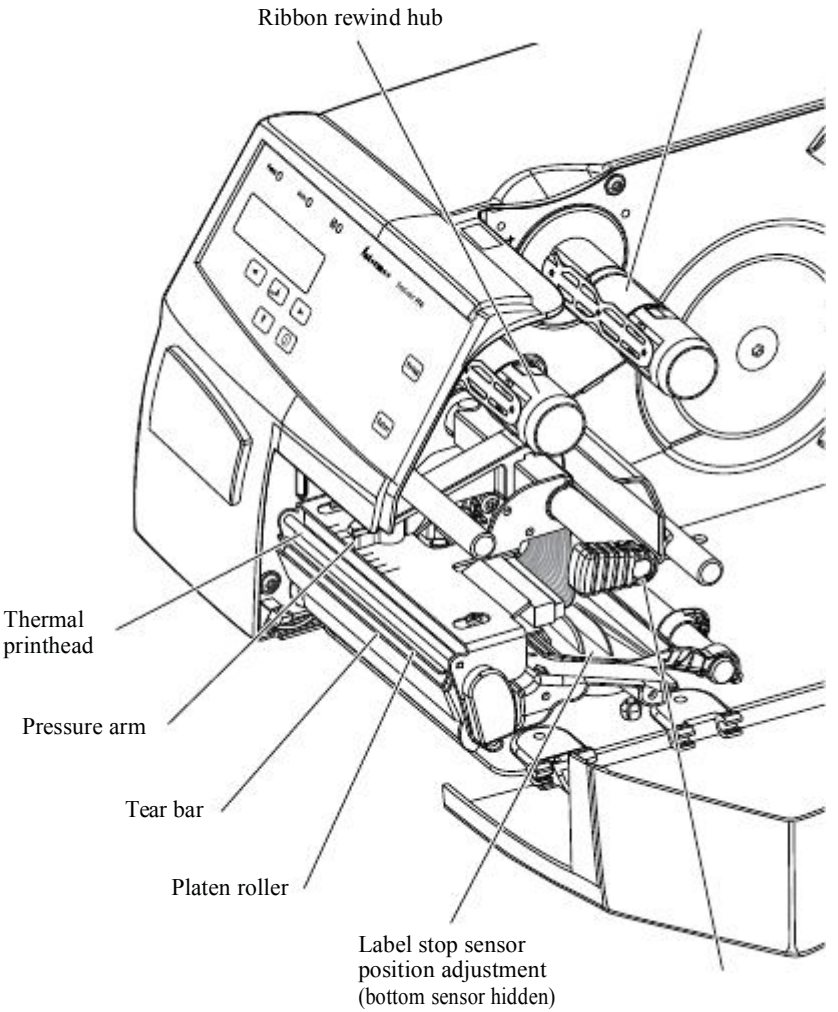
- Position1:Themediacompartmentisfullyenclosedbyalong sidedoor,regardlessoftheexistenceofanyintegrallinertakeup unit.Maximumrollsizeis152mm(6inches).
- Position2:Theshortsidedooronlyenclosestheprint mechanismanddoesnothaveanintegrallinertakeupunit. Maximumrollsizeis203mm(8.00inches).
- Position3L:Theshortsidedoorandanintegrallinertakeup unit.Thispositionisalsousedwiththeoptional8-inch Megatop.Formoreinformation,seeChapter7, “Options” on page67.Maximumrollsizeis213mm(8.38inches).
- Position4isnotused.



Media Supply Positions

Print Mechanism

Theprintmechanismfeaturesahigh-performancethermal printheadwithquick-mountfittingstofacilitatereplacement. Thethermaltransferribbonmechanismisomittedindedicated directthermalprintingmodels.



Print mechanism

Connections

Beforeyoucanusetheserialinterface,youmayneedtosetupthe communicationparameters,suchasbaudrate,parity,etc.as describedinChapter5, “SettingUpthePrinter” onpage49.

Severaltypesofoptionalinterfaceandnetworkboardsare available.Formoreinformation,seeChapter7, “Options” on page67.RefertoChapter5, “SettingUpthePrinter” on page49,Chapter6 “SetupMode” onpage61,andAppendixC, “Interfaces” onpage117forconnectionandsetupinstructions.

To connect the printer to power

1 Placetheprinteronalevelsurface,nearanACoutlet.You shouldbeabletoeasilyaccesstheprintertoloadmediaandto removetheprintout.

2 Checkandensurethattheprinterisswitchedoff.

3 Connectthepowercordfromthesocketontherearplateto anelectricaloutlet(90to265VAC).

To connect the printer to a computer

- TheEasycoderPF4iCompactIndustrialisfittedwithone9-pinD-stylesubminiature(DB9)socketfortheRS-232serial interfaceport.Formoreinformation,seeAppendixC, “Interfaces” onpage117.

Controls and Indicators

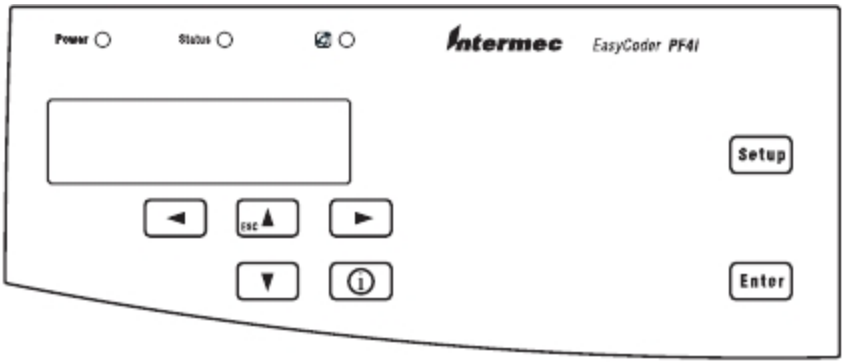
TheEasyCoderPF4ihasseveralwaysofcommunicatingdirectly withitsoperator:threecoloredindicatorlamps,adisplay window,amembrane-switchkeyboardwith7keys,alargeFeed/ Pausebuttonontheprinter’sfront,andabeeper.

Indicator Lamps

TheindicatorsarecoloredLEDs(LightEmittingDiodes)andare usedforthefollowingpurposes:

- Power(solidgreen)indicatesthatthepowerison.
- Status(solidgreen)indicatesthattheprinterisreadyforuse.
- Status(flashinggreen)indicatesthattheprinteris communicating.
- Status(solidred)indicatesanerrorcondition.Formore information,seeChapter8, “Troubleshooting” onpage73.
-

asolution.Formoreinformation,seeChapter8,



Display

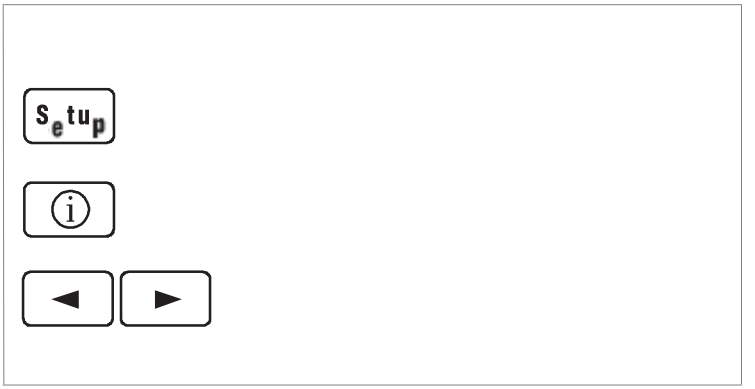
ThedisplaywindowcontainsanLCD(LiquidCrystalDisplay) withbackgroundilluminationandtwolinesoftext,eachwith16 characters.Itshowsamessagewhencertainerrorsoccurand guidestheoperatorthroughupgrading,startup,andsetup.The followingerrorsarereported:

Error Messages and Conditions

Message Displayed
PAUSE
PAPEROUT
RIBBONOUT
PRINTHEADUP/PRESS FEED
OPEN&SHUTCUTTER
RIBBONFITTED
PAPERFAULT

Keyboard

Thekeyboardisofthemembrane-switchtypeandhassevenkeys, plusonelarge “Feed/Pause” button.Somekeyshavehard-coded functionsinStartupandSetupmodes.



Keyboard Color Code

Yellow:Operationoftheprinter(operatorlevel)
Green:Setuporservice(siteorservicetechnicianlevel)
White:Datainputtoprinter(operatorortechnicianlevel)

Beeper

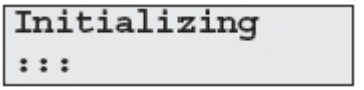
Thebeeperacknowledgesthatakeyhasbeenpressed.Optionally, anaudiblealarmcanbeenabledusinganIPLcommandthatwill startbeepingatpaperoutandribbonoutandcontinueuntilthe startofreload.

Switching On the Printer

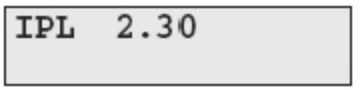
Beforeswitchingontheprinter,makethenecessaryconnections, andcheckthattheprintheadisengaged.

SwitchonthepowerusingtheOn/Offswitchontherearplate. The “Power” controllamponthefrontpanellightsupwhenthe powerison.Waitforafewmomentswhiletheprinterloadsthe programandrunssomeself-diagnostictests.

Afterashorttime,theprinterisinitialized.Theprogressofthe initializationisindicatedbyanincreasingnumberofcolonson thelowerlineinthedisplay.



Whentheinitializationiscompleted,alabelisfedout.The followingmessage,whichistheIPLversionnumber,appearsin theDisplayWindow,indicatingthattheprinterisreadyfor operation.



3 Media Load

Thischapterexplainshowtoloadtheprinterwithvariouskinds ofcontinuous,gap,ormarkstockforthefollowingmodesof operation:

- Tear-Off(straight-through)
- Tear-OffwithQuickLoad(straightthrough)
- Cut-Off(requiresoptionalcutter)
- Peel-Off(self-adhesivestrip),requiresoptionalintegralself-stripunitwithlinertakeup
- ExternalSupply(fan-foldedstock)

Tear-Off (Straight-Through)

TheEasyCoderPF4iprintercanprintonlabels,tickets,tags,and continuousstockinvariousforms.Thissectiondescribesthecase whenthemediaistornoffmanuallyagainsttheprinter’ stearbar. Thismethodisalsoknownas “straight-throughprinting.”

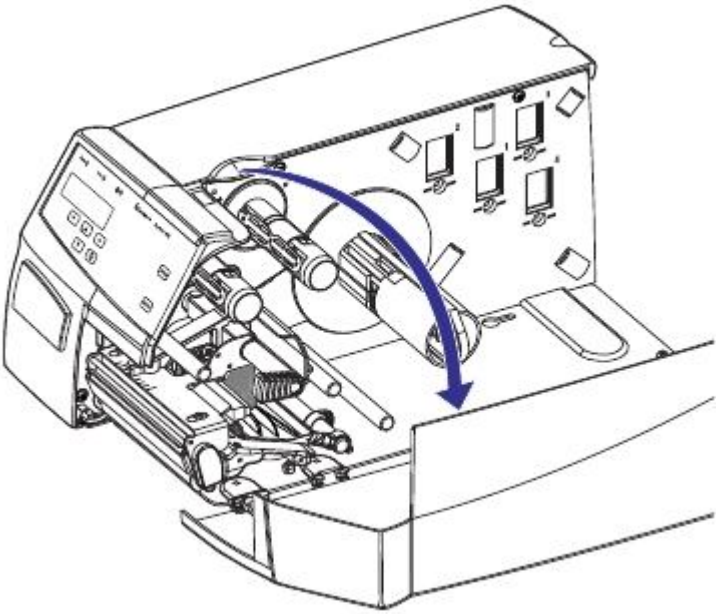
Tear-offcanbeusedfor:

- Non-adhesivecontinuousstock
- Self-adhesivecontinuousstockwithliner
- Self-adhesivelabelswithliner(gaporcontinuousstock)
- Ticketswithgaps(gapstock),withorwithoutperforations
- Ticketswithblackmarks(markstock),withorwithout perforations

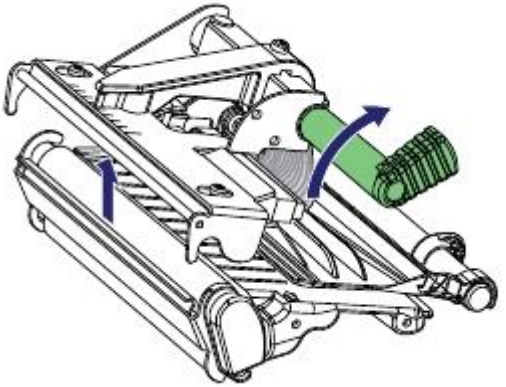
Anoptionallabeltakensensorcanholdtheprintingofthenext copyinthebatchuntilthepresentcopyhasbeenremoved.For moreinformation,see “LabelTakenSensor” onpage71.

To load media for tear-off operation:

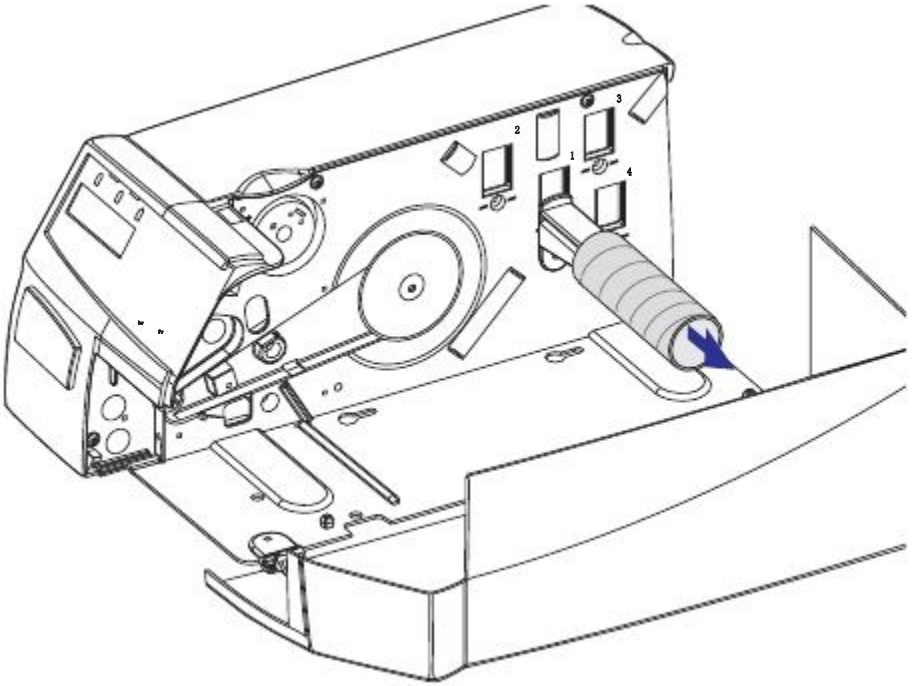
1Openthesidedoor.



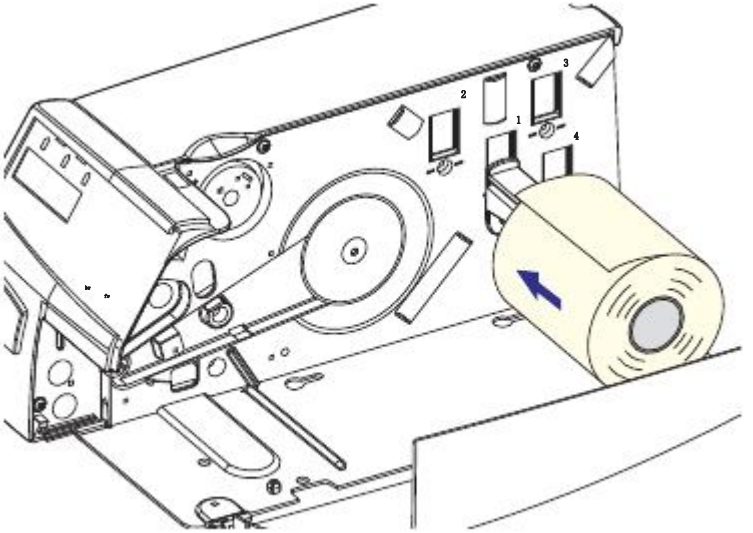
2Turntheprintheadliftleverclockwisetoraisetheprinthead.



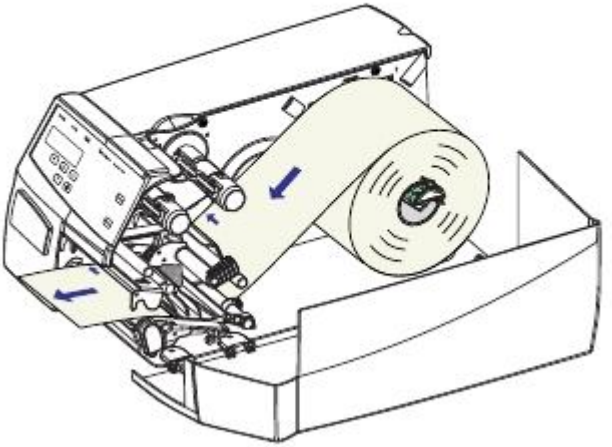
3Removeanyemptycorefromthemediasupplyhub.



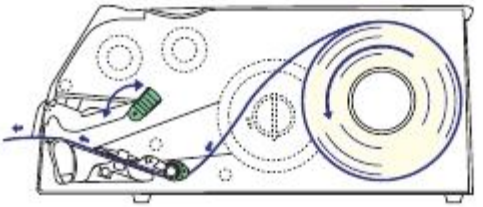
4 Fit a new roll of media onto the media supply hub and adjust the edge guides so that the roll becomes flush with the center section.



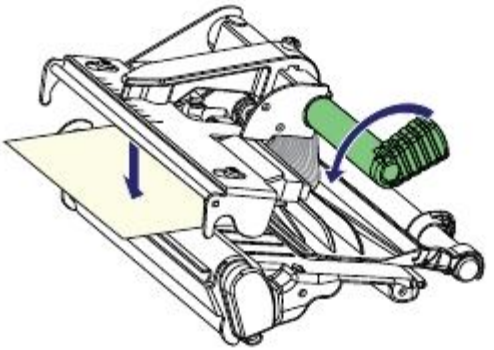
5 Route the media underneath the slack absorber and forward towards the print mechanism. The slack absorber can be rotated for better access and then snap-locked in open position. Route the media through the print unit and push it inwards as far as it will go.



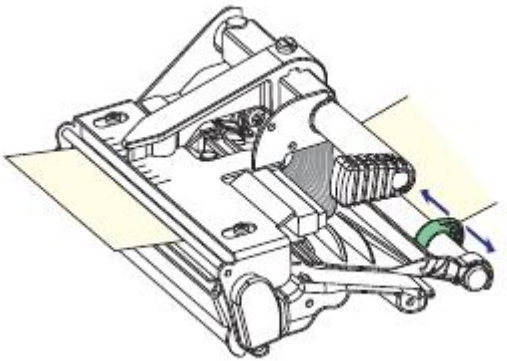
6Thisdiagramshowsthepaththemediawilltakethroughthe printer.



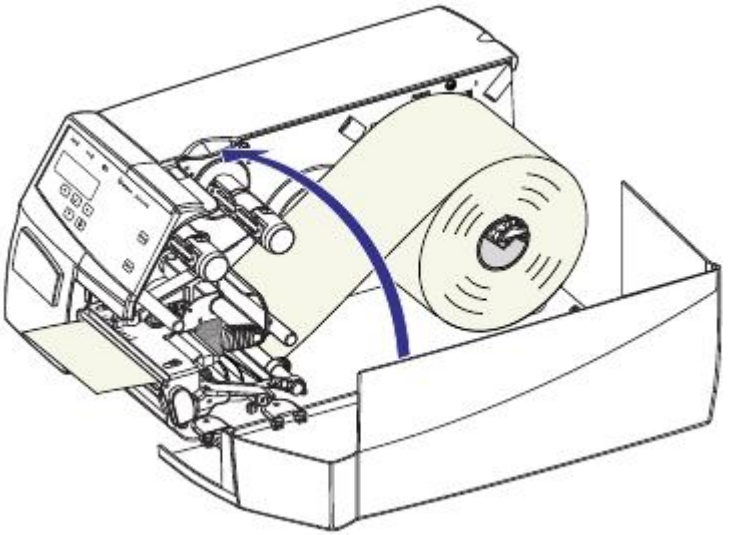
7Turntheprintheadliftlevercounter-clockwisetothe“closed” positiontoengagetheprinthead.



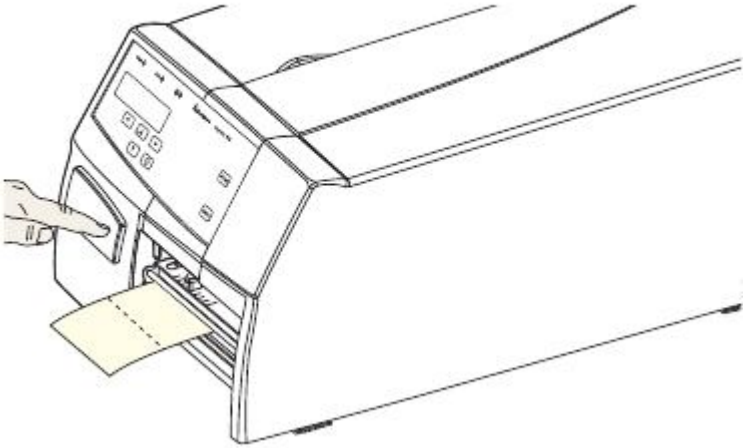
8Adjustthepositionofthegreenedgeguidessothatthemedia isguidedwithaminimumofplay.



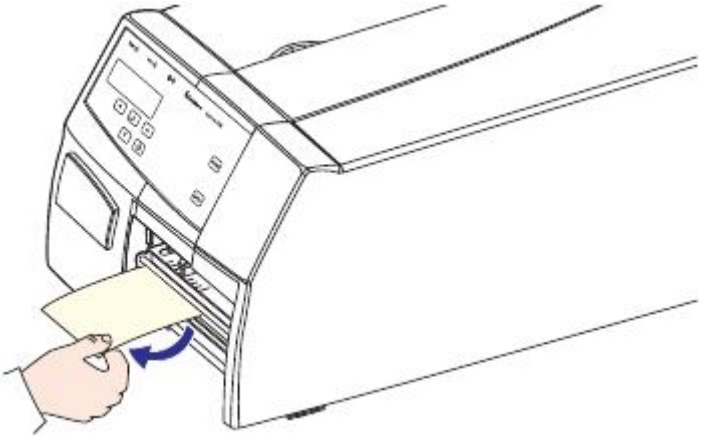
9Closethesidedoor.



10Pressthe**Feed/Pause**keytoadvancethemediaandadjustthe mediafeed.



11 Tear off the media by grabbing the outer edge and pulling downwards.



Tear-Off with Quick-Load (Straight Through)

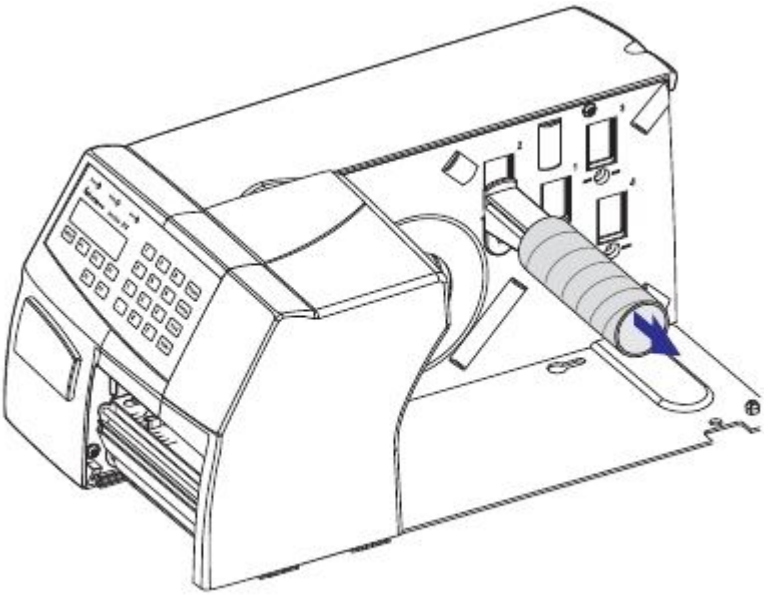
In addition to the media load procedure for tear-off (straight-through) operation described earlier in this chapter, the EasyCoder PF4i can optionally be fitted with a set of Quick-Load guides that makes media load much easier and quicker, especially if the printer has a short side door. See Chapter 10, “Adjustments” on page 97 for installation instructions.

Quick-Load cannot be combined with peel-off (self-strip) operation.

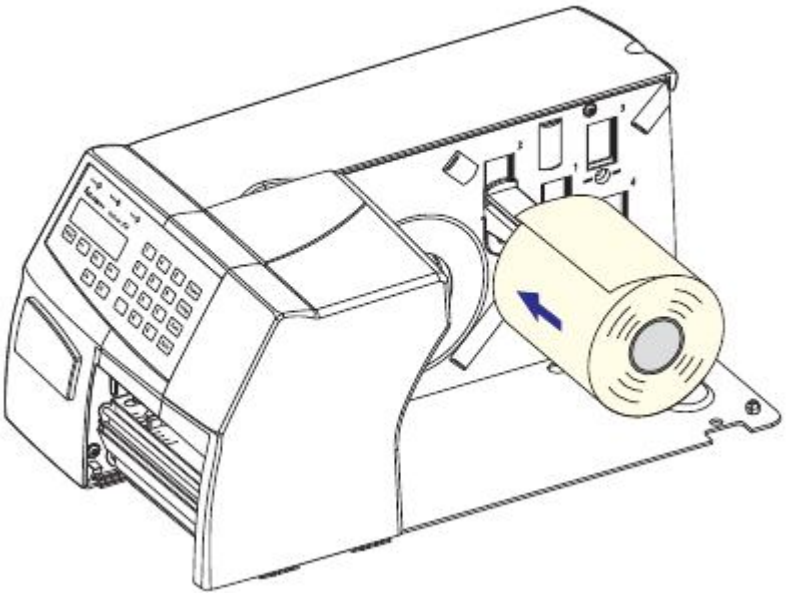
An optional label taken sensor can hold the printing of the next copy in the batch until the present copy has been removed, see “LabelTakenSensor” on page 71.

To load media for Tear-Off with Quick-Load operation

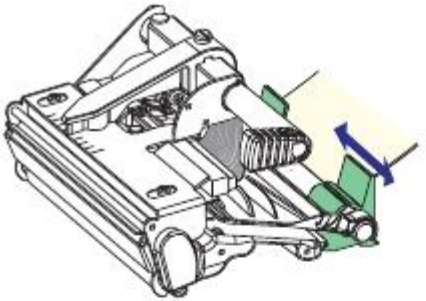
1Removeanyemptycorefromthemediasupplyrollpost.



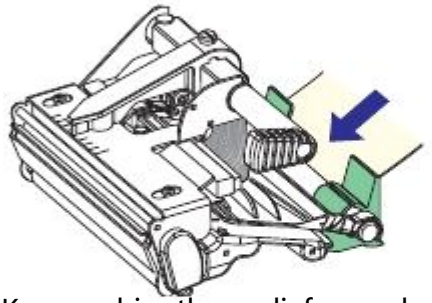
2Fitanewrollofmediaonthesupplypostandadjusttheedge guidesotherollbecomesflushwiththecentersection.



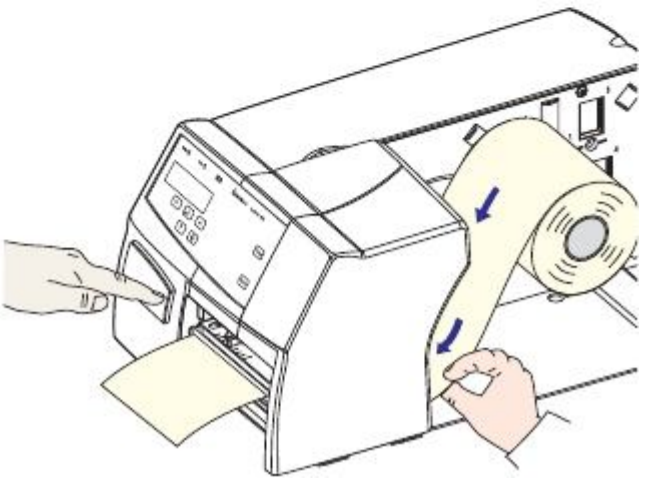
3 If necessary, adjust the outer Quick-Load guide to fit the width of the media.



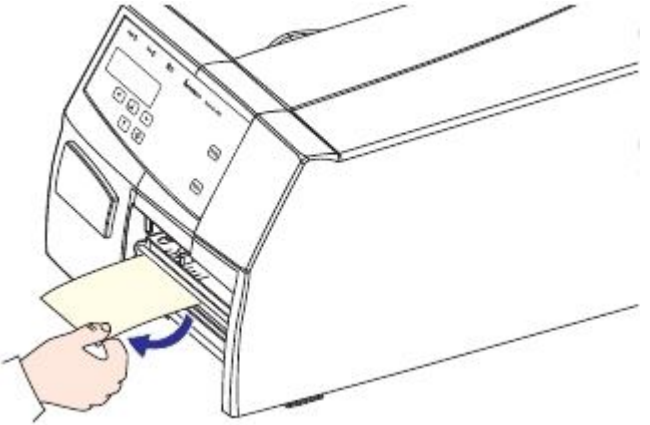
4 Insert the media between the guides and feed it forward until the media reaches the platen roller and cannot be inserted any further.



5 Keep pushing the media forward while pressing the Feed/Pause button.



6 To tear off the media, grab the outer edge and pull downwards.



Cut-Off

The EasyCoder PF4i printer can print on labels, tickets, tags, and continuous stock in various forms. This section describes the case when the media is to be cut off by an automatic paper cutter (optional).

Cut-off can be used for:

- Non-adhesive continuous stock
- Self-adhesive labels with liner (cut only liner between labels)

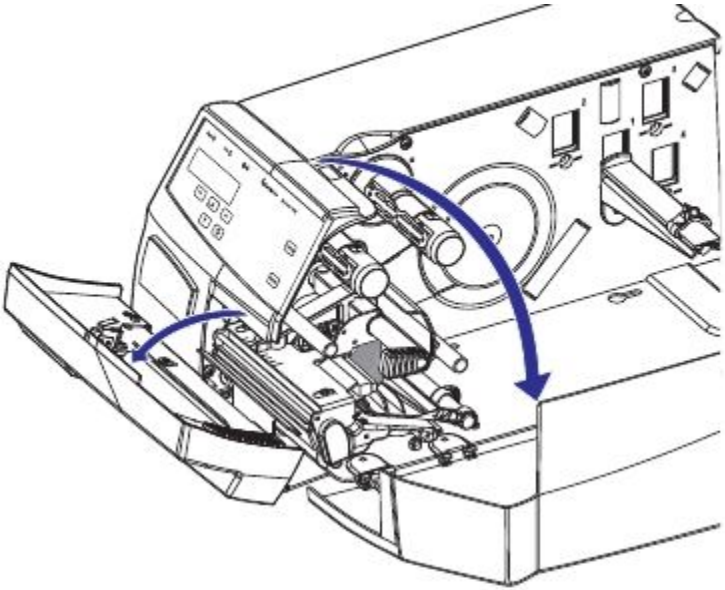
The cutter is designed to cut through paper-based media with a thickness between 60 and 175 µm, which roughly corresponds to a paper weight of 60 to 175 grams/m2 (basis weight 40 to 120 lb.). The cutter should not be used to cut through labels because the adhesive will stick to the shears, which can damage the cutter.

The optional label taken sensor cannot be used with the cutter.

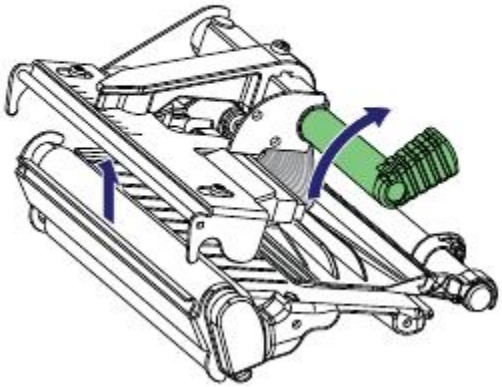
The paper cutter can be used with both a standard edge guide or Quick-Load guides and with any type of side door. In this chapter, a printer with a standard edge guide and a long side door is illustrated.

To load media for cut-off operation

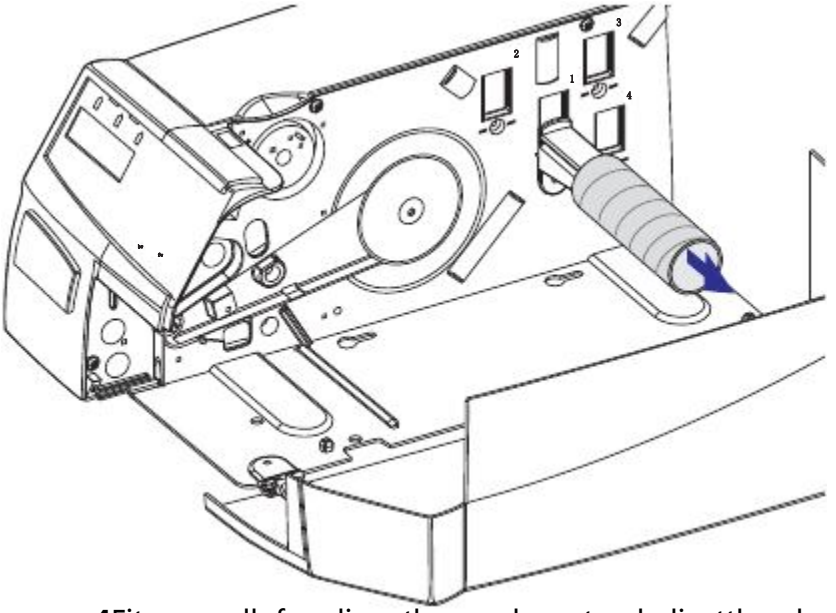
1Switchoffthepower.Openthecutterandthesidedoor.



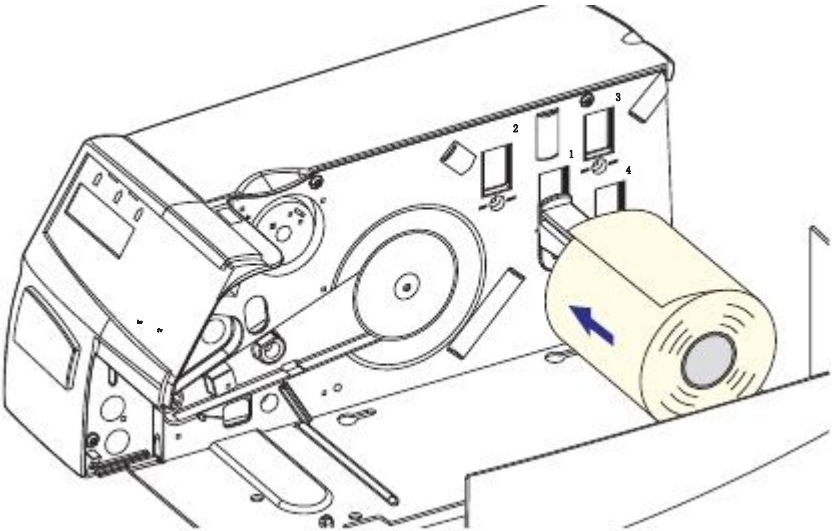
2Turntheprintheadliftleverclockwisetoraisetheprinthead.



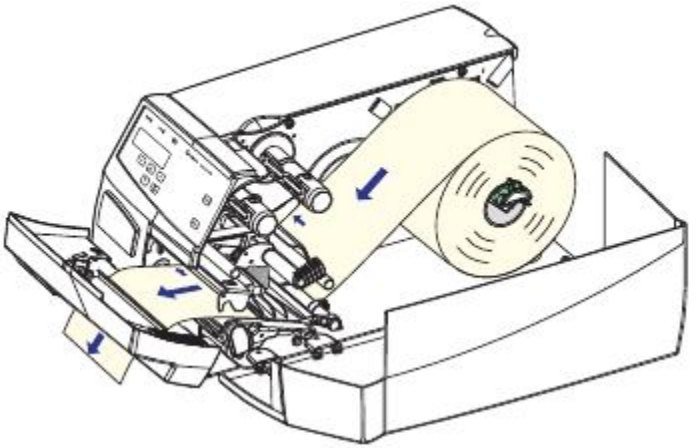
3Removeanyemptycorefromthemediasupplyrollpost.



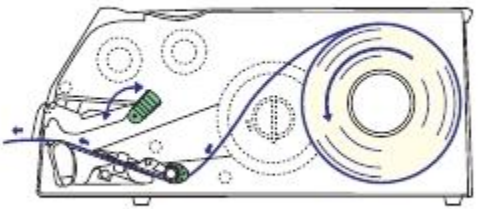
4Fitanewrollofmediaonthesupplypostandadjusttheedge guidesotherollbecomesflushwiththecentersection.



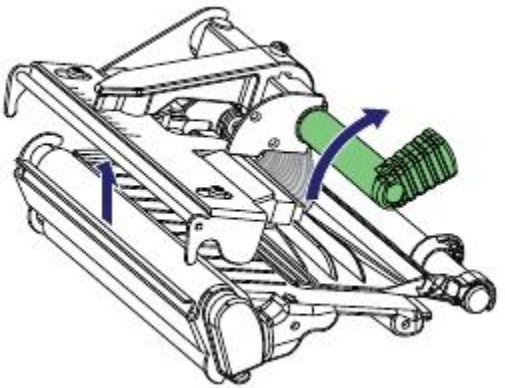
5Routethemediathroughtheprintmechanismandcutter.
Thenpushittowardsthecentersectionasfarasitwillgo.



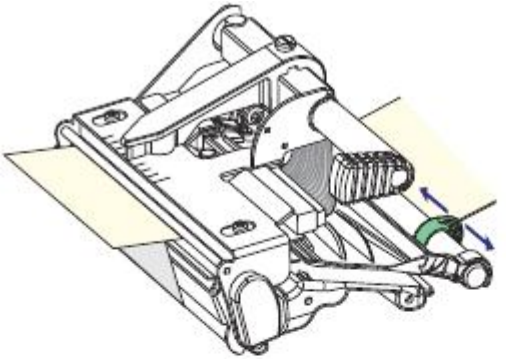
6Thisdiagramshowsthemediapath.



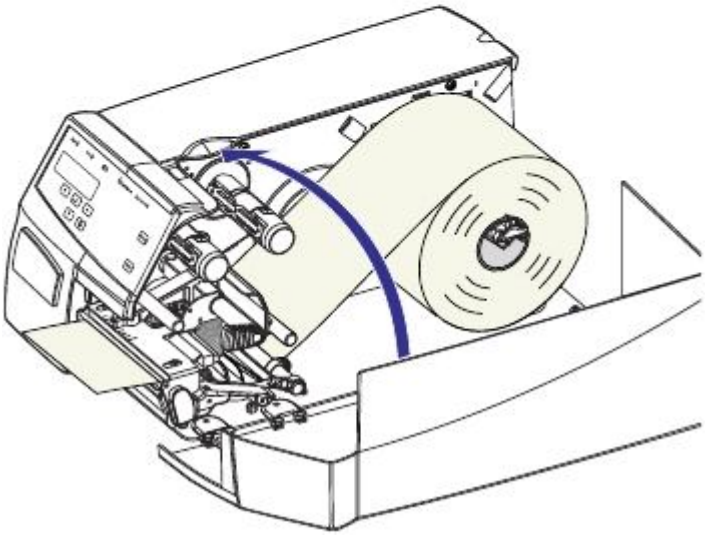
7Turntheprintheadliftlevercounterclockwisetoengagethe printhead.



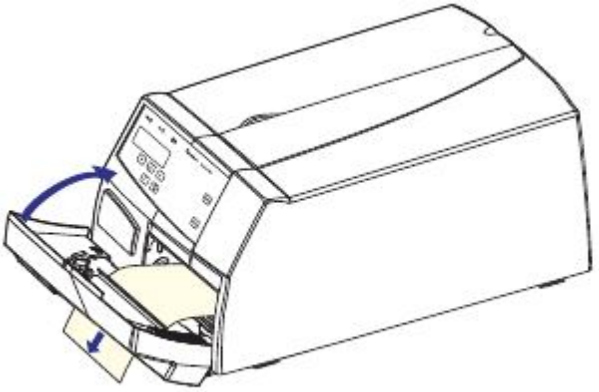
8Adjustthepositionofthegreenedgeguidesothemediais guidedwithaminimumofplay.



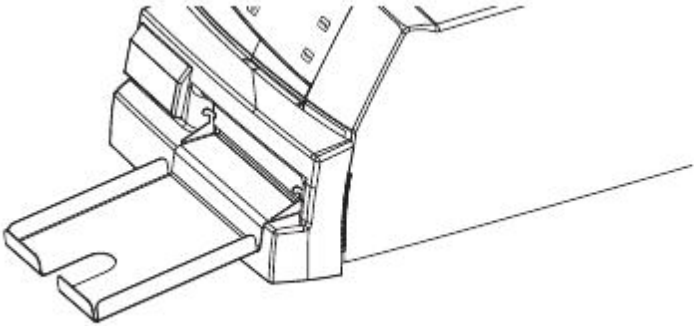
9Closethesidedoor.



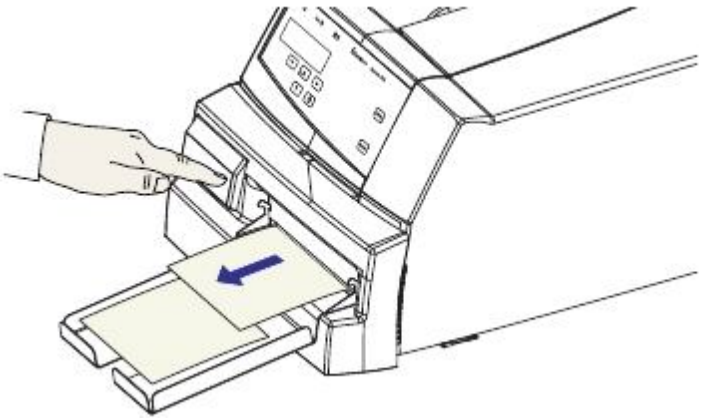
10Closethecutterwhilepullingonthemedia.



11Anoptionaltraycanbeattachedtothecuttertocollectthe cutofflabels, tickets, ortags.



12PresstheFeed/Pausebuttononthecuttertoadvancethe mediaandadjustthemediafeed.



Peel-Off (Self-Strip)

TheEasyCoderPF4iprintercanprintonlabels,tickets,tags,and continuousstockinvariousforms.

Thissectiondescribesthecasewhenself-adhesivelabelsare separatedfromthelinerimmediatelyafterprinting,which requiresanoptionalinternallinertakeupunit.Formore information,see “IntegralLinerTakeupKit” onpage70.Thisis alsoknownas “Self-strip” operation.

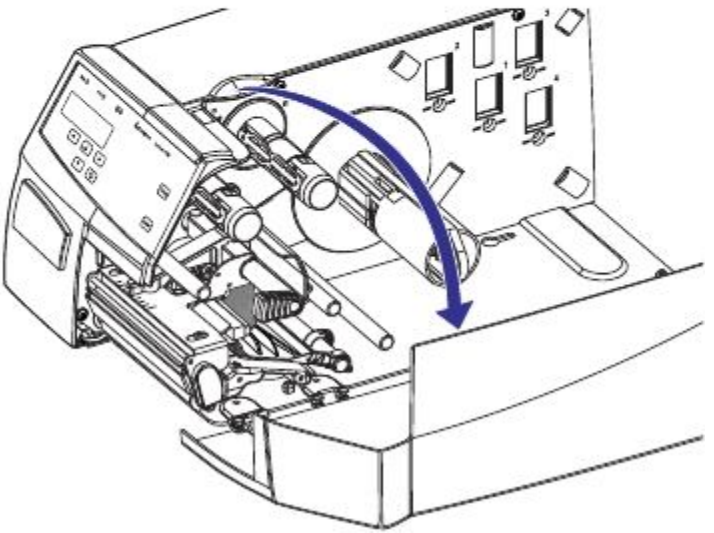
Peel-offcanonlybeusedforself-adhesivelabelswithliner.

Anoptionallabel-takensensorcanholdtheprintingofthenext labelinabatchuntilthepresentlabelhasbeenremoved.For moreinformation,see “LabelTakenSensor” onpage71.

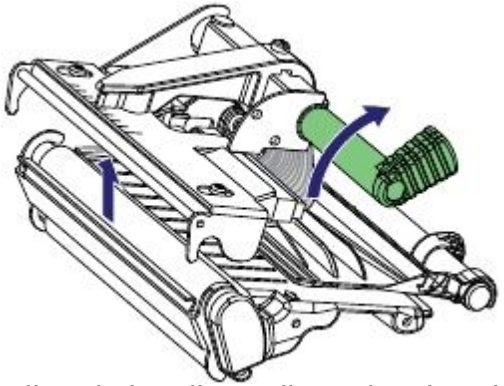
Note:Peel-offoperationsetshighdemandsonthemediafor properlabelstiffness,releasecharacteristicsoftheadhesiveand liner,resistanceagainstelectrostaticcharge,andsoon.Ifthese specificrequirementsarenotmet,thelabelswillnotdispense properly.Consultyourmediasupplierortestthemediatomake sureitissuitableforyourapplication.

To load media for peel-off operation:

1Openthesidedoor.

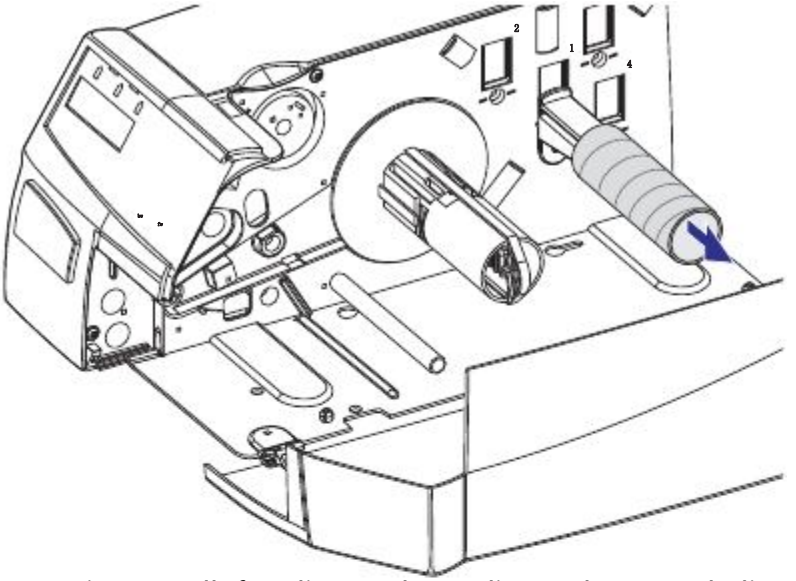


2Turntheprintheadliftleverclockwisetoraisetheprinthead.

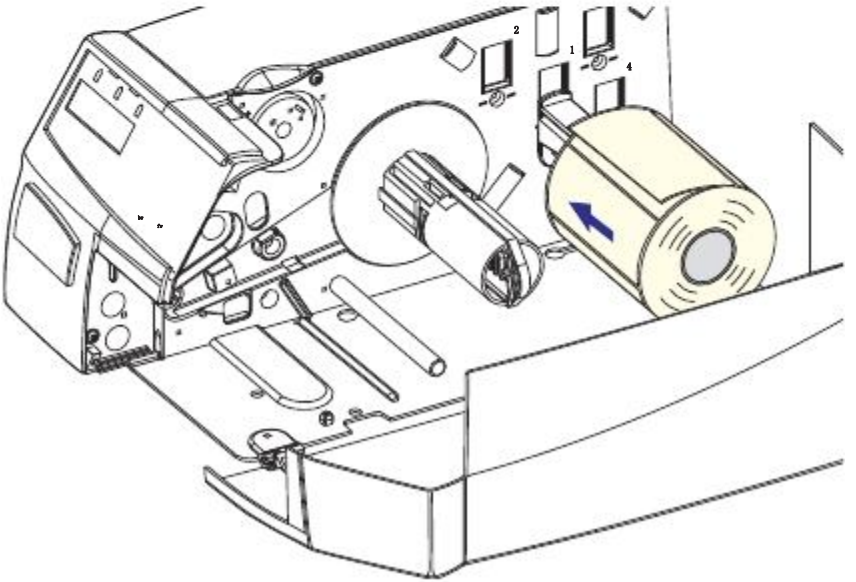


3Pullouttthehandletocollapsethetakeuphubandthen removeanyremainingliner.

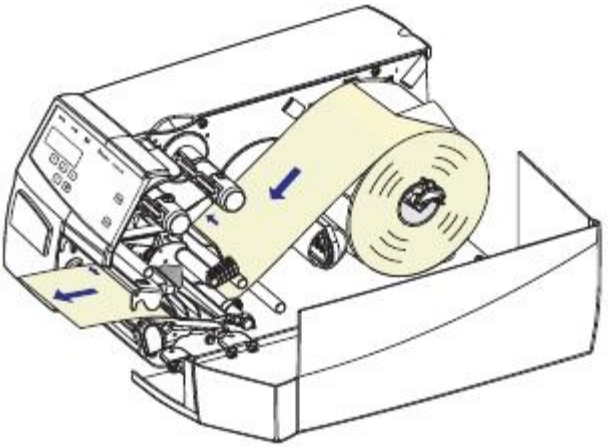
4Removeanyemptycorefromthemediasupplyrollpost.



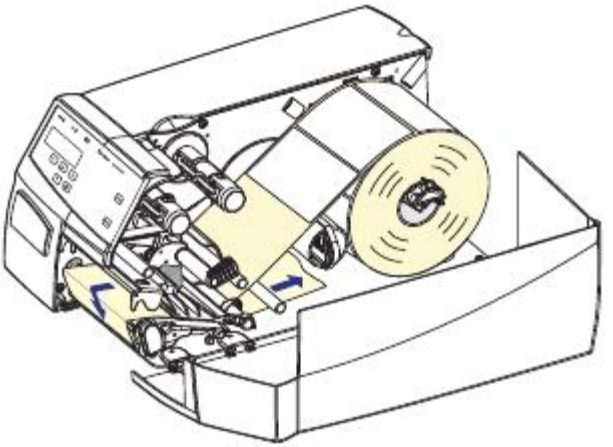
5Fitanewrollofmediaontothemediasupplypostandadjust theedgeguidessothatthelabelrollbecomesflushwiththe centersection.



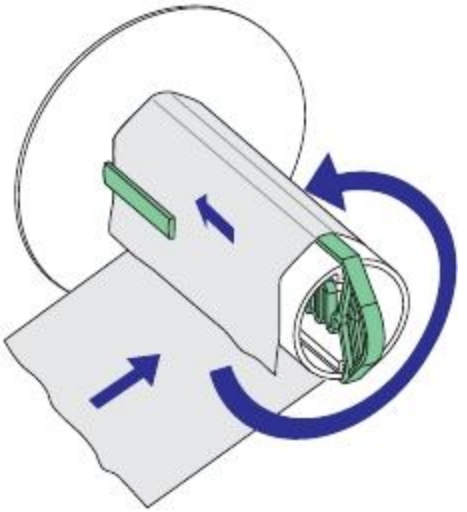
6Pulloutapproximately50cm(20inches)oflabelsand removethelabelsfromtheliner.Routethelinerthroughthe printmechanismandpushitinwards.



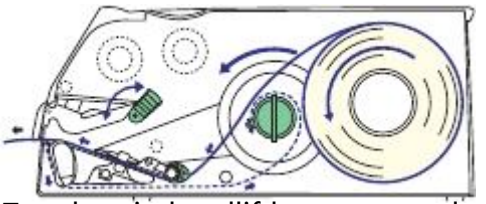
7Routethelineraroundthetearbarandlinerdriverollerand backundertheprintmechanismandguideshaft.



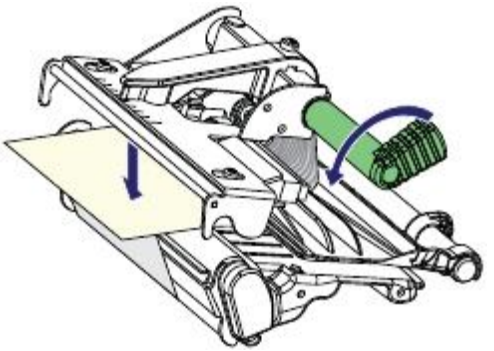
8 Insert the start of the liner under the lip of the takeup hub and then rotate the hub counterclockwise a few turns to wind up some of the liner.



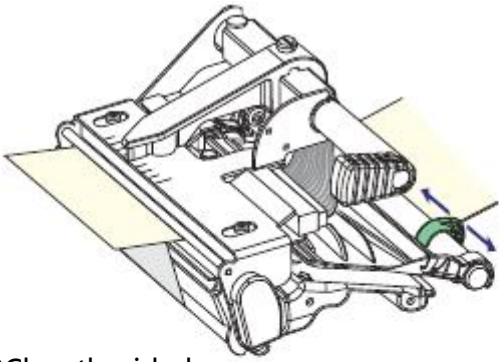
9 This diagram shows the path the media and liner will take through the printer.



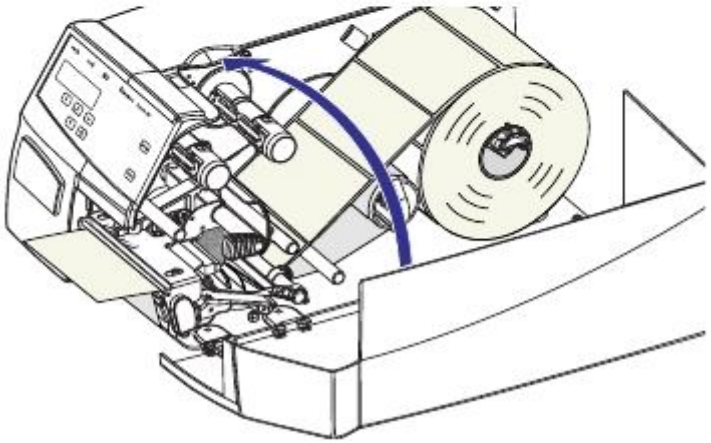
10 Turn the printhead lift lever counterclockwise to engage the printhead.



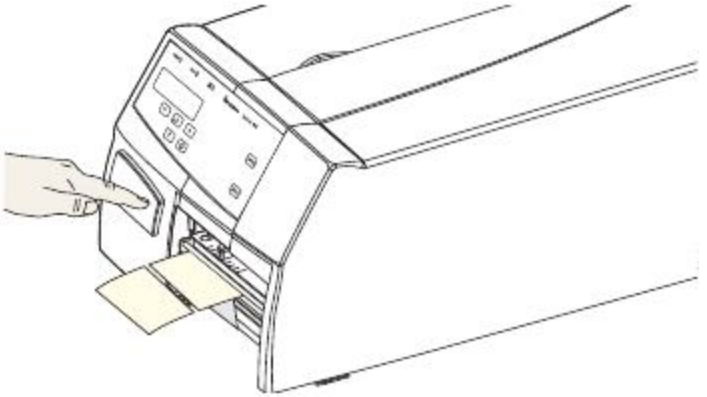
11Adjustthepositionofthegreenedgeguidessothatthemedia isguidedwithaminimumofplay.



12Closethesidedoor.



13 Press the **Feed/Pause** key to advance the media and adjust the media feed.



External Supply (Fan-Fold)

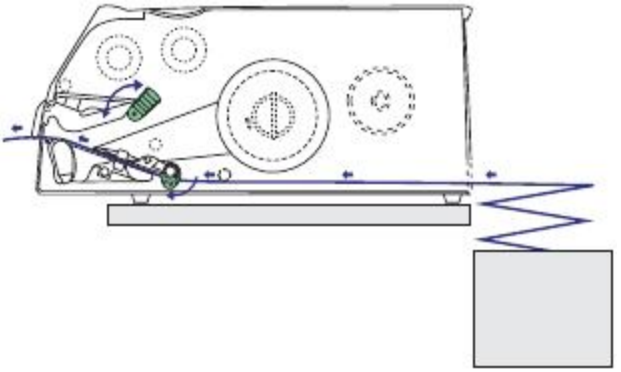
This section describes the setup when an external media supply is used such as a stack of fan-folded tickets. External supply can be used with tear-off (straight-through) printing, and preferably using the QuickLoad guides.

External supply can be used with either the short or long side doors and there is no need to remove the media supply post.

When using an external media supply, take care to protect the media from dust, dirt, and other foreign particles that can impair the printout quality or cause unnecessary wear to the printhead.

Depending on brand and quality, all direct thermal media are more or less sensitive to heat, direct sunlight, moisture, oil, plasticizers, fat, and other substances. Protect the media accordingly.

Thisdiagramshowsthemediapathfromanexternalsupply.If usingthestandardedgeguide(asopposedtoQuick-Load guides),turnittoverticalposition.



4 Ribbon Load for Thermal Transfer Printing

Thischapterexplainshowtoloadtheprinterwithribbonfor thermaltransferprinting.

Ribbon Load

TheEasyCoderPF4iprintercanprintonlabels,tickets,tags,and continuousstockusingeitherdirectthermalprintingonspecial heat-sensitivemediaorthermaltransferprintingusingaspecial ink-coatedribbon.Mosttransferribbonsdonotsmearatroom temperature.

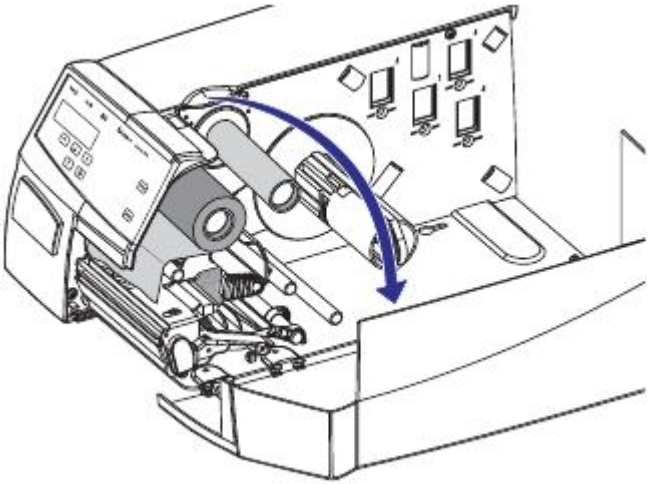
Thermaltransferprintingmakesitpossibletouseawiderangeof receivingfacematerialsandgivesadurableprintoutless vulnerabletofat,chemicals,heat,orsunlightthandirectthermal printing.Makesuretoselectatypeofribbonthatmatchesthe typeofreceivingfacematerialandsetuptheprinter appropriately.

TheEasyCoderPF4iprintercanusetransferribbonrollswound withtheink-coatedsidefacingeitheroutwardorinward. Illustrationsinthismanualshowtheink-coatedsidefacing inward.

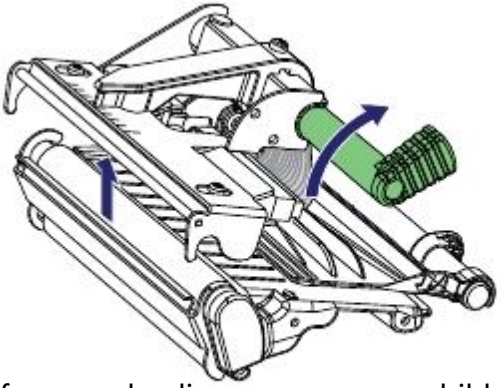
Ribbonisusuallyloadedinconnectionwithmedia replenishment,butloadedmediaisnotshownintheillustrations inthischapterinordertogiveaclearerviewoftheribbonpath. Formedialoadinstructions,seeChapter3, “MediaLoad” on page17.

To load ribbon for thermal transfer operation:

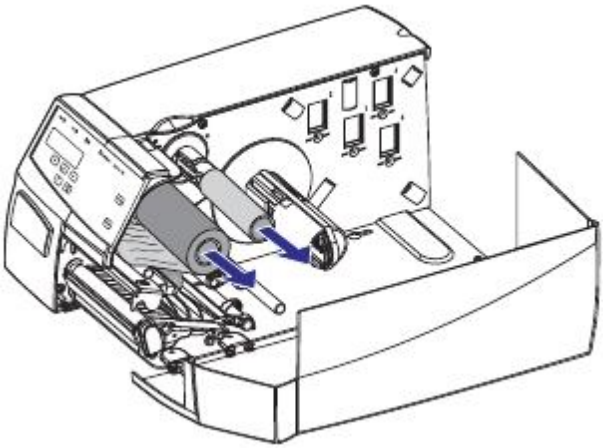
1Openthesidedoor.



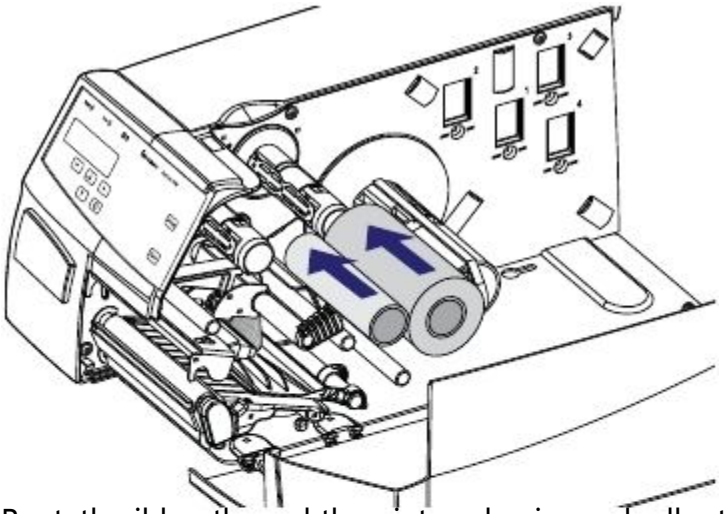
2Turntheprintheadliftleverclockwisetoraisetheprinthead.



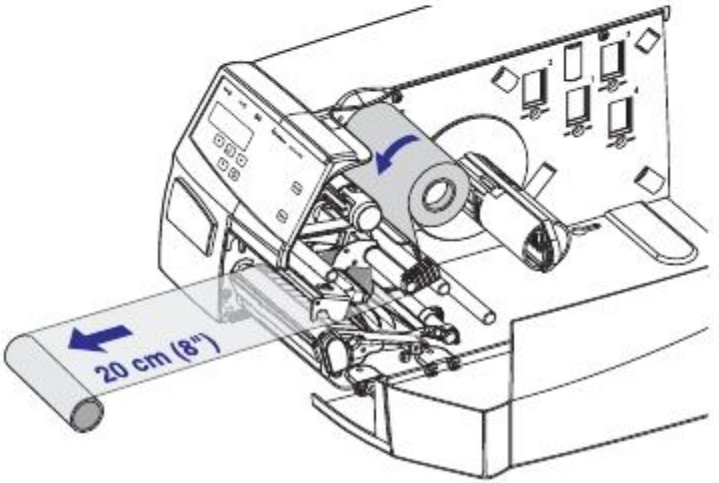
3Ifyouarereloading,removeanyusedribbonandempty ribboncore.



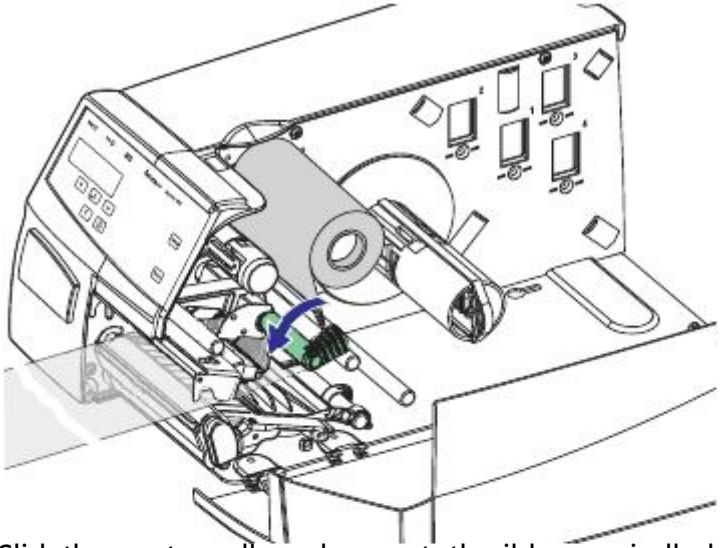
4 Slide the ribbon roll onto the supply hub so the ink-coated side faces down when the ribbon is routed through the print mechanism.



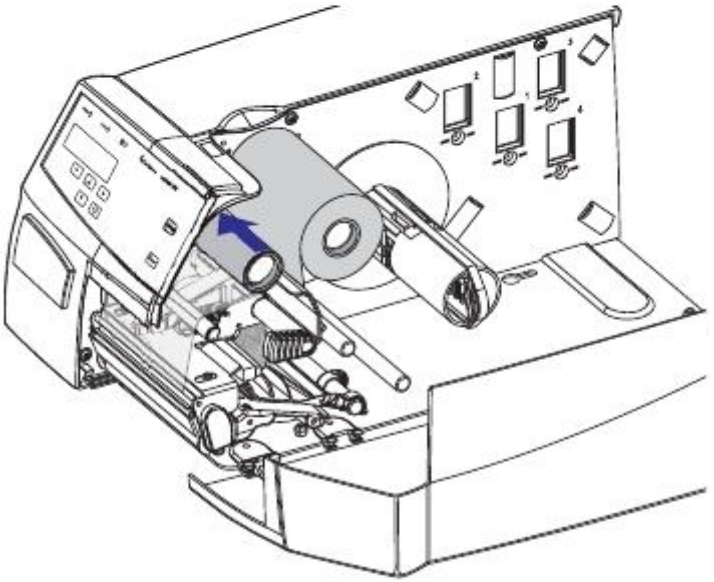
5 Route the ribbon through the print mechanism and pull out approximately 20 cm (8 inches) of ribbon.



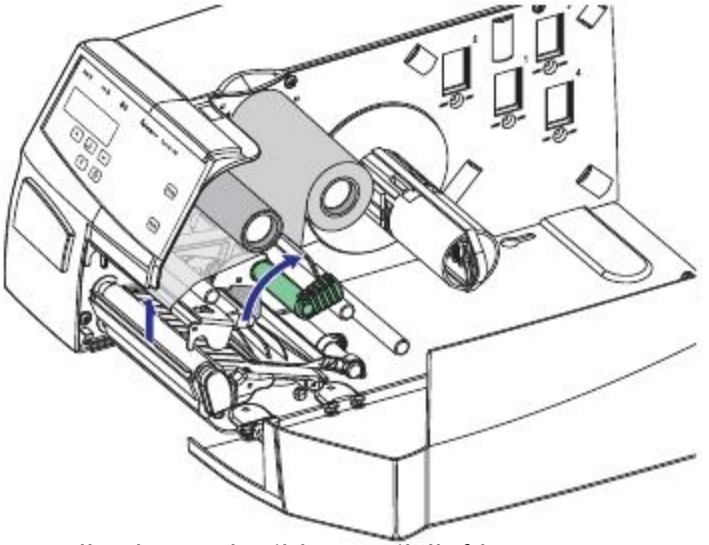
6Withoutreleasingtheribbon,turntheprintheadliftlever counterclockwisetoengagetheprintheadandlocktheribbon.



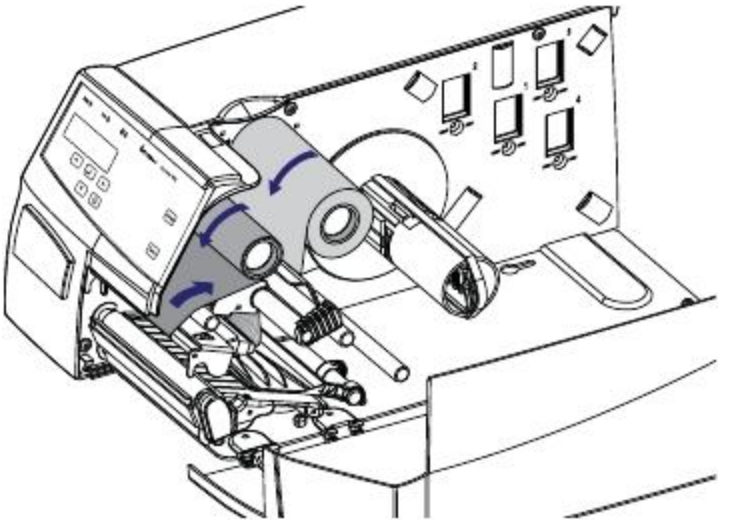
7Slidetheemptycardboardcoreontotheribbonrewindhub sotheribboniswoundupwhenthehubrotatescounter-clockwise.



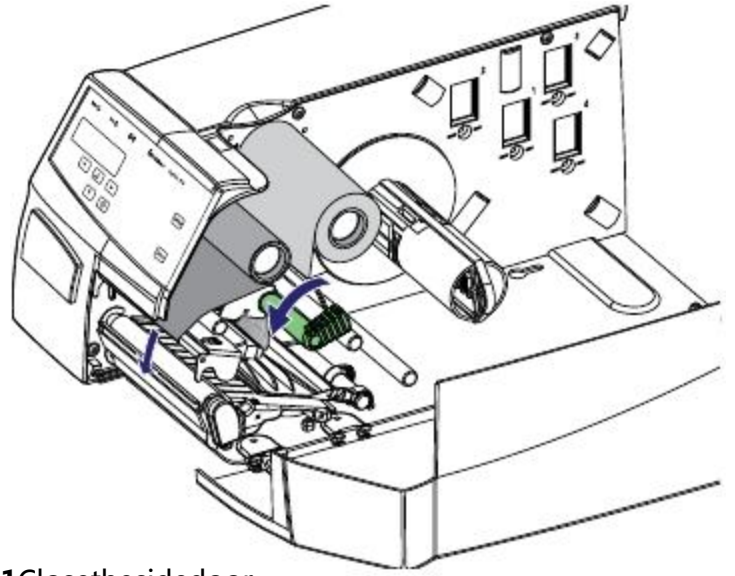
8 Turn the printhead lift lever clockwise to raise the printhead and release the ribbon.



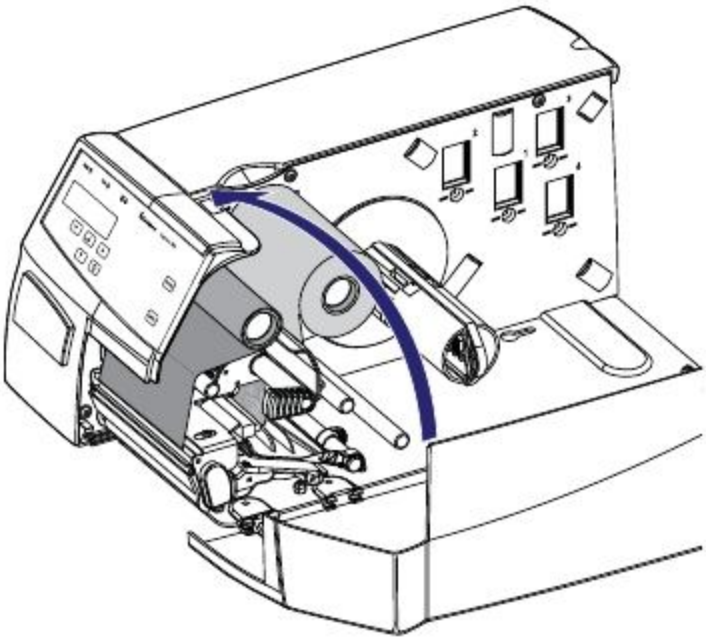
9 Manually advance the ribbon until all of the transparent leader has passed the printhead and the ribbon becomes tight.



10 Turn the printhead lift knob counterclockwise to engage the printhead.



11 Close the side door.



5 Setting Up the Printer

This chapter describes the various parameters that are used during Setup mode or in the various application programs to configure the printer for the user's specific requirements. It covers the following topics:

- Description
- Default setup
- Setup parameters for communication, test/service, media, and configuration.

For more information on Setup Mode, see Chapter 6, "Setup Mode" on page 61.

Description

Setupdefinestheprinter’ sserialcommunication,testandservice operations,andspecifieswhichtypesofmediaandribbonare loadedintheprinter.Iftheprinter’ sdefaultsetupdoesnotmeet yourrequirements,followtheinstructionsin “SetupMode” on page61tochangethesetup.

Default Setup

Thislistdoesnotincludeoptions.

Ser-Com

Setup Parameters

Serial Communication

Theserialcommunicationparameterscontrolthe communicationbetweentheprinterandtheconnectedcomputer orotherdevicesontheserialport.

Note:Theserialcommunicationparametershavenoeffecton parallelorEasyLANcommunications.

Makesuretheprinter’scommunicationparametersmatchthe parameterssetupontheconnecteddeviceandviceversa.Ifthe printerandhostsetupsdonotmatch,theresponsefromthe printertohostwillbegarbled.

Baud Rate

Thebaudrateisthetransmissionspeedinbitspersecond.There are8options:

- 1200
- 2400
- 4800
- 9600(default)
- 19200
- 38400
- 57600
- 115200

Data Bits

Databitsspecifiesthenumberofbitsthatwilldefineacharacter.

- 7CharactersASCII000to127decimal
- 8CharactersASCII000to255decimal(default)

Parity

Theparitydecideshowthefirmwarewillcheckfortransmission errors.Therearefouroptions:None(default),Even,Odd,and Space.

Stop Bits

Thenumberofstopbitsspecifieshowmanybitswilldefinethe endofacharacter.Therearetwooptions:1(default),2.

Protocol

XON/XOFF (default)

IntheXON/XOFFprotocol,dataflowcontrolisachievedby usingXON(DC1)andXOFF(DC3)characters.Messageblocks arenotrequiredtobebracketedbytheStartofText(STX)and EndofText(ETX)characters.However,atpoweruporaftera resetallcharactersexceptENQorVTwillbeignoreduntilan STXisdetected.Themessagelengthinthisprotocolis unrestricted.Thatis,theprinterprocessesinformationasitis beingdownloadedandstopswhenthereisnomoreinformation.

XON/XOFFprotocolconformstogenerallyacceptedindustry standards.Noend-of-messageresponseissenttothehostother thanXOFF.AnXONwillbesentonpowerup.

SinceDC1andDC3areusedfordataflowcontrol,theprinter statuscharactersaredifferentthanthoseoftheStandard Protocol.Ifthehostignorestheprinter’sXOFF,theprinterwill resendanXOFFafterreceivingevery15charactersfromthehost.

Intermec Standard Protocol

TheIntermecPrinterStandardProtocolisahalf-duplexprotocol. Alldatatransmissionstotheprinterconsistofstatusinquiry (ENQ), statusdump(VT), ormessageblocks. Eachmessage blockstartswiththeStartofText(STX)characterandendswith theEndofText(ETX)character. Eachmessageblockmustbe 255charactersorless, includingtheSTXandETXcharacters. Theprinterrespondstoeachstatusinquiryormessageblock withtheprinterstatus. Thehostshouldchecktheprinterstatus beforedownloadingamessageblocktotheprinter. ENQcauses theprintertotransmititshighestpriioritystatus, whileVT instructstheprintertotransmitallstatusthatappliesintheorder oftheirpriority. Thepossibleprinterstatus, indescending priority, is:

Condition
Bufferalreadyfull
Printheadraised
Ribbonfault
Nolabelstock
Buffernowfull
Printheadhot
Labelatstrippin
Labelskipping
Ready
Printing

Test/Service

Testprint

ThispartoftheSetupModeallowsyoutoprintvarioustypesof testlabels. Gotothedesiredoptionandpress**Enter**. Theprinter willstartprintingthetestlabelorlabels. Press**the Feed/Pause** buttontoholdtheprintingtemporarily. Toresumeprinting, press**the Feed/Pause**buttonagain. Thefollowingoptionsare available:

Configuration

Choosesoftware(SW),hardware(HW),ornetwork.

TheSoftwareConfigurationLabelcontains:

- Currentconfigurationparametersstoredintheprinter’s memory
- Definedpages
- Definedformats
- Definedgraphics
- Definedfonts
- Anyinstalledprinteroptions

TheHardwareConfigurationLabelcontains:

- Printermemoryinformation
- Printermileage
- Printheadsettings
- Firmwarechecksum,program,andversionnumber

TheNetworkConfigurationLabelcontains:

- WINSName
- MACAddress
- IPSelection
- IPAddress
- Netmask
- DefaultRouter
- NameServer
- MailServer
- PrimaryWINSServer
- SecondaryWINSServer
- NetworkStatistics

Format Label

TheFormatLabelcontainsasingleformatthatyoucanuseto evaluatetheprintqualityofaparticularformat.Thisoption printslabelsforalltheformatsstoredintheprinter’smemory.

Page Label

ThePageLabelteststheabilityoftheprintertoreceiveandprint singleormultiplepagesoflabeldatathatissentfromthehost. Thisoptionprintslabelsforallthepagesstoredintheprinter’s memory.

UDC Label

TheUDCLabelteststheabilityoftheprintertoreceiveand printsingleormultipleuser-definedcharacters(bitmapgraphics) thataresentfromthehost.Thisoptionprintslabelsforallthe UDCsstoredintheprinter’smemory.

Font Label

TheFontLabelcontainsallthecharactersinasinglefont.This optionprintslabelsforalltheuser-definedfonts(UDF)storedin theprinter’smemory.

Data Dump

Ifdatadumpisenabledbyselectingthe “Yes” option,theprinter printsalldataandprotocolcharactersreceivedontheserialport. AnASCIIandhexadecimalrepresentationofeachcharacteris printed.

Memory Reset

Therearetwooptions.Thememorywillberesettofactory defaultassoonasanoptionhasbeenselectedand<Enter>is pressed.Selectbetween “All”,whichresetstheentirememory, and “Configuration”,whichjustresetstheconfigurationpartof thememory.

Media

Themediaparameterstellthefirmwarethecharacteristicsofthe mediathatwillbeusedsothattheprintoutwillbepositioned correctlyforthebestpossiblequality.

Media Type

TheMediaTypeparameterscontrolhowthelabelstopsensor (LSS)andthemediafeedwork.Therearethreemediatype options:

- Gapisusedforadhesivelabelsmountedonliner(backing paper)orcontinuouspaperstockwithdetectionslots.Thisis thedefault.
- Markisusedforlabels,tickets,orstripprovidedwithblack marksattheback.
- Continuousisusedforcontinuousstockwithoutany detectionslotsorblackmarks.

Paper Type

ThePaperTypeparameterscontrolhowthetransferribbon mechanismandtheribbonsensorwork.Therearetwopaper typeoptions:

- DT(DirectThermal)isusedforheat-sensitivemediawithout anyneedforathermaltransferribbon.Thisisthedefault.
- TTR(ThermalTransfer)isusedfornonheat-sensitive receivingfacematerialsincombinationwithathermal transferribbon.

Label Length Dots

TheLabelLengthsetupspecifiesthelengthindotsofeachcopy alongthemediafeeddirection(X-coordinate).Thisisusedfor “label-out” detection.Aselectionofvaluesispresentedasaloop. Selectthevaluethatisclosesttotheactuallength.Defaultis 1200dots.

Sensitivity (Media Sensitivity Number)

Thissetupparameterspecifiesthecharacteristicsofthedirect thermalmediaorcombinationofreceivingfacematerialand thermaltransferribbon,sotheprinter’sfirmwarecanoptimize theheatingoftheprintheadandtheprintspeed.Themedia sensitivitynumbercanbechangedusingPrintSet,third-party software,oranIPLcommand(<SI>gn[,m]).SeeAppendixD, “MediaSensitivityNumber” onpage121formoreinformation regardingthemediasensitivitynumber.

Darkness

Use this parameter to make minor adjustments of the blackness in the printout, for example to adapt the printer to variations in quality between different batches of the same media. The value can be set within the range -10% to +10% where -10 is the lightest and 10 is the darkest. Default value is 0.

Label Rest Point

Specifies where label stops for removal. Use this for peel-off (self-strip) applications. The valid range is -30 (furthest back) to 30 (furthest forward). Default is 0. Also available as an IPL command (<SI>fn).

Form Adj Dots X

Specifies where the X-position of the origin should be placed on the label. The valid range is -30 (closest to the leading edge) to 30 (furthest from the leading edge). Default is 0.

Form Adj Dots Y

Specifies where the Y-position of the origin should be placed on the label. The valid range is -30 (closest to the center section) to 30 (furthest from the center section). Default is 0.

Configuration

Emulation Mode

The emulation mode lets you print barcode labels that were originally designed on an 86XX printer in multiples of 10 or 15 mil. When the printer is working in emulation mode, not all IPL commands are supported. For a complete list of commands available during emulation mode, see the latest version of the *IPL Programming Reference Manual* (P/N 066396-xxx).

To exit emulation mode, select emulation "None". This is the default.

Print Speed

You can select the print speed from 4 in/sec (100 mm/sec) to 8 in/sec (200 mm/sec) with an interval of 1 in/sec. The higher the print speed, the more wear on the printhead, so do not use a higher print speed than necessary. Some direct thermal media or ribbon/media combinations may not allow the highest alternatives without the printout quality being adversely affected.

Cutter (optional)

By default, "Not Installed" is displayed. If a cutter is installed, you must manually indicate that condition to the firmware by selecting either "Enable" or "Disable." Once you have done that, you can also use IPL commands to enable or disable the cutter:

<STX>R<ETX> enter print/configuration mode

<STX>c0<ETX> Disable cutter

<STX>c1<ETX> Enable cutter

Label Taken Sensor (optional)

To make the printer work in self-strip mode, which means it waits for a label to be removed before the next label is printed, the self-strip mode must be enabled. This can also be done by executing the following commands:

<STX>R<ETX> enter print/configuration mode

<STX><SI>t0<ETX> Disable self-strip

<STX><SI>t1<ETX> Enable self-strip

If the label taken sensor does not work properly, the sensitivity can be calibrated using Setup Mode. Select "LTS Calibration" and follow the instructions in the display. Make sure that no direct sunlight or interior lighting interferes with the label taken sensor.

Returning to Factory Default Setup

There are three ways to return to the factory default setup of the printer:

- Insert a special CompactFlash memory card and restart the printer.
- Use the Memory Reset option in the Test/Service part of the Setup Mode.
- Use the printer's built-in keyboard.

To return to factory default setup using the keyboard

1. Lift the printhead.
2. Switch on the power to the printer and press the <i> key and wait until the printer beeps.
3. Swiftly press the following keys.

   <▼> → <▲/Esc> → <▲/Esc> → <◀>
4. The following message will be displayed:

   ```
   Factory Default?
   Enter=Yes ESC=No
   ```
5. Within 10 seconds, press **Enter** to reset the printer to factory default. The parameters will be reset and the printer will continue the normal startup.

   If you press <▲/Esc> or wait until the 10 seconds time-out has passed, the normal startup process will continue without any reset being performed.

Note: Resetting to the factory default will reset all files used to store settings, but it does not affect settings that were already loaded before the files were removed. This means that, for example, EasyLAN Wireless settings (SSID, keys, etc.) retain their values until the next reboot. To reload all settings, reset the printer to the factory defaults and then reboot it.

6 Setup Mode

ThischapterdescribeshowtonavigateSetupModeandprovides overviewsofSetupMode.

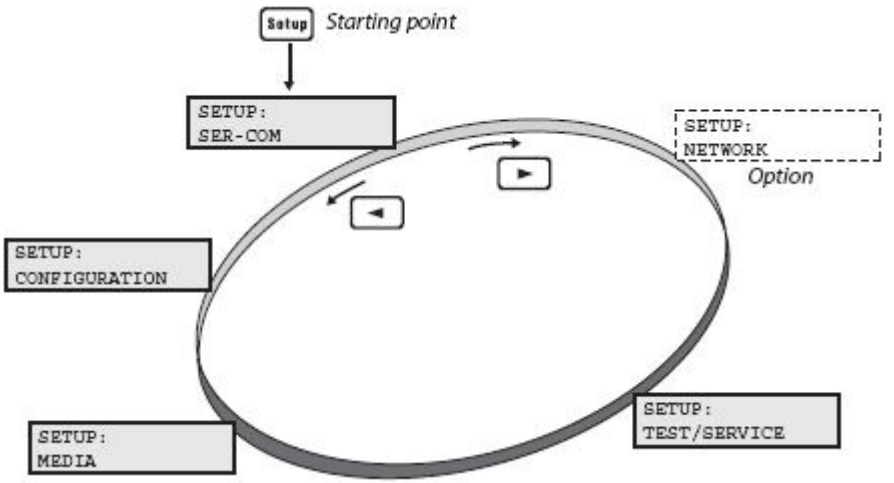
Navigating in Setup Mode

EntertheSetupModebypressingtheSetupkeyontheprinter’s frontpanel.Textinthedisplayguideyouthroughthesetup procedure.Usetheprinter’skeyboardtonavigatemenus, acknowledgedisplayedvalues,orselectorenternewvalues.

◄	Moveonestepbackonthesamelevel.
ESC ▲	Moveuponelevelwithoutchangingthesetting.
►	Moveforwardonthesamelevel.
▼	Movedownonelevel.
Enter	Acknowledgeandmovetonextmenu.
Setup	ExitSetupMode.CanbeusedanywhereinSetupMode.

SetupModeisorganizedasanendlessloopwithanumberof sub-categories.Atstartup,thefirmwaredeterminesifan EasyLANinterfaceboardisinstalledintheprinter.Ifso,the Networksetupmenusareshownin theSetupMode.

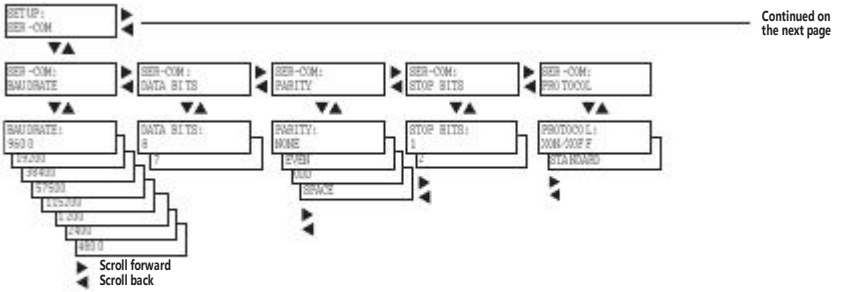
Thediagrambelowshowstheoptionsinthemainloop.Detailed overviewsareshownonthefollowingpages.



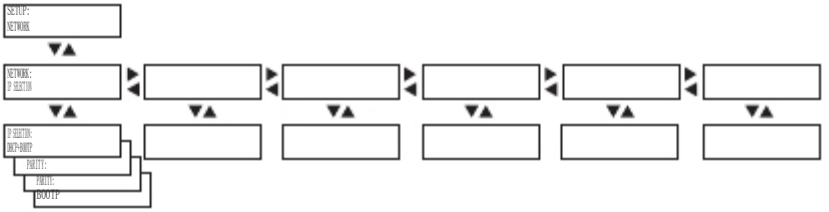
Setup Modes

All diagrams assume Intermec Fingerprint Language (IPL) version 2.30 or later. Dotted boxes and lines indicate options. Thick boxes indicate default options. Values inside brackets indicate default settings.

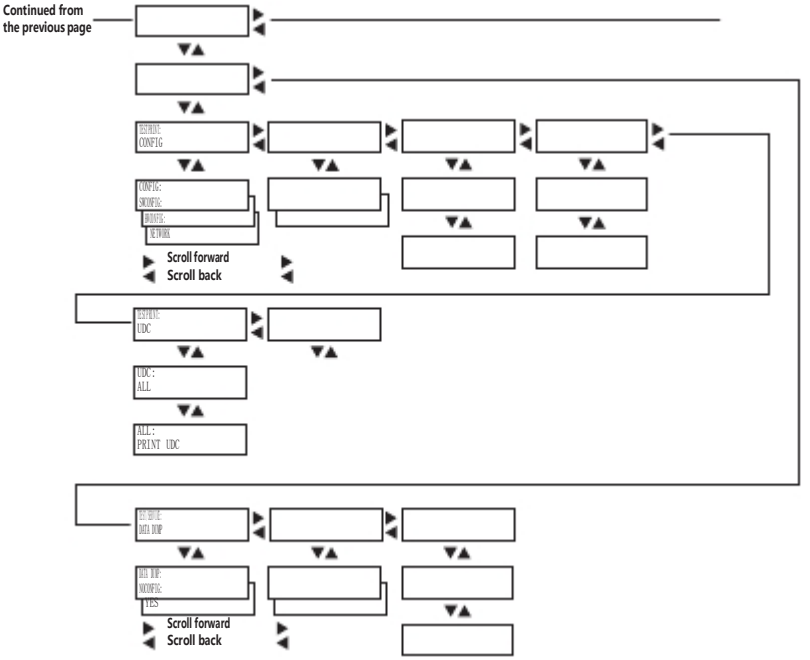
Serial Communications



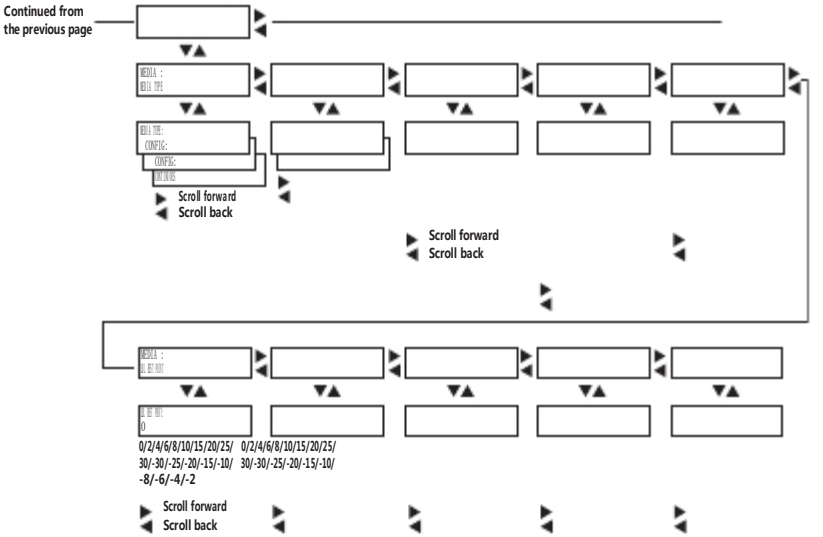
Network (Optional)



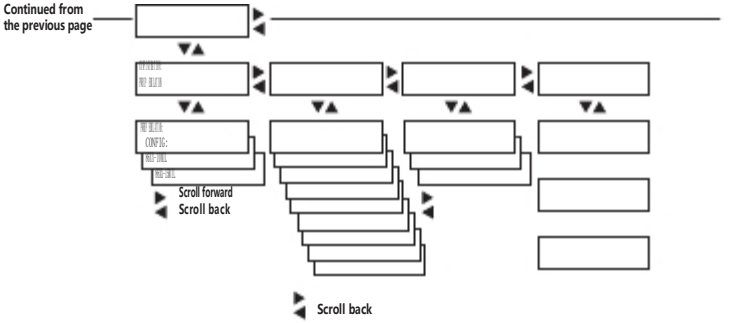
Test/Service



Media



Configuration

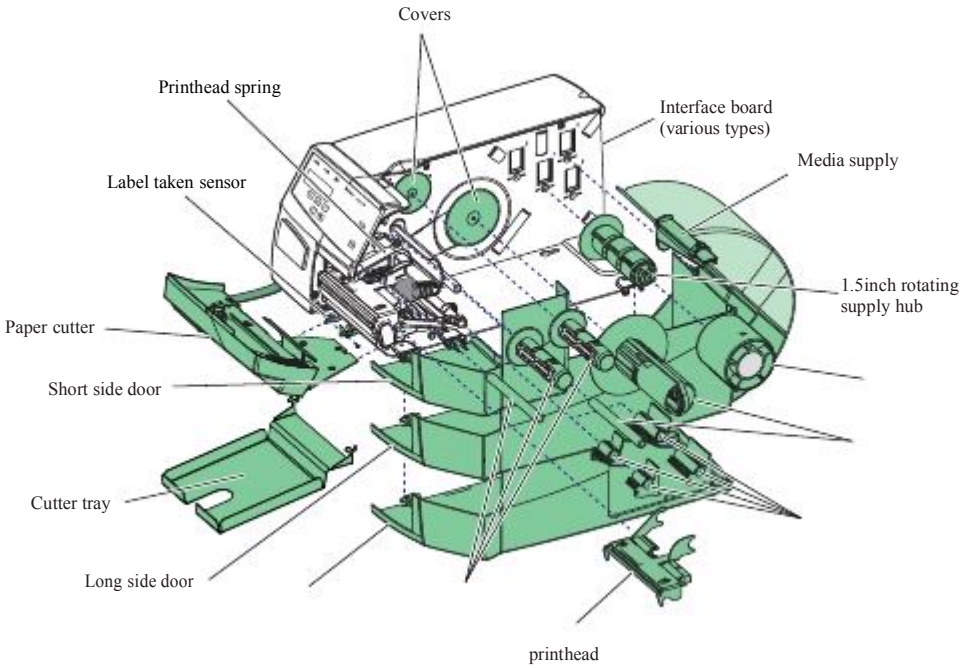


7 Options

This chapter describes the options available for the EasyCoder PF4i printer. The options can be factory installed, field-installed by an authorized service technician, or in some cases installed by the operator.

Overview

TheEasyCoderPF4iprinterprovidesahighdegreeofflexibility becauseithasamodulardesign.Byaddingoptionstothebasic printer,theEasyCoderPF4iprintercanbeadaptedforavariety ofapplications.Someoptionsshouldbeinstalledbyan authorizedservicetechnicianorareonlyavailableasfactory-installedoptions.



DTP Model

Inthededicateddirectthermalprinting(DTP)model,the thermaltransferribbonmechanismisomitted.Theprinter’s defaultsetupchangestodirectthermalprintingandsetup parametersforthermaltransferprintingarenotdisplayed.

Side Doors and Megatop

TheEasyCoderPF4icomeswitheitherashortsidedoor,which onlycoverstheprintmechanismorwithoneoftwotypesoflong sidedoors,whichenclosetheentiremediacompartment.The standardlongsidedoorhasaflattopandaslotforexternal mediasupply.The8-inchMegatopversionhasahinged transparentcanopythatenclosesamediarollwithadiameterof upto213mm(8.38inches).Thelongsidedoorisgenerally illustratedthroughoutthismanual,butpicturesoftheshortside doorcanbefoundatthestartofthischapterandinChapter3, “MediaLoad” onpage17.

Paper Cutter

Thepapercutterisavailablebothasafactory-installedoption andasaoperator-installablekit.Theoptionalpapercutteris designedtocutoffcontinuousfeedpaper-basedstockorliner betweenlabels.Maximumthicknessfornormalpaper-based materialsis175µm(~175grams/m2).Thecut-offtags,tickets, orlabelscanbecollectedinanoptionaltray.

Thepapercutterincreasestheprinter’stotalweightby approximately1.0kg(2.2pounds)anditslengthby28mm(1.1 inches).

Thepapercutterisintendedtocutthroughcontinuousnon-adhesivepaper-basedmediaorthroughthelinerbetweenlabels. Itmustnotcutthroughanyadhesive,whichwouldsticktothe cuttingpartsandrapidlyrenderthecutterinoperableand possiblyalsocausedamagetotheelectricmotor.Ifyoucut throughadhesive,youmayhavetocleanthecuttingparts.Tilt thecutterunitdownandwipeitusingapieceoftissuemoistened withisopropylalcohol.

Formedialoadinstructions,see “Cut-Off” onpage26.

Thecuttingedgewillrotatewhenthepowerisswitchedon andwhentheprinterisre-booted.Alwayskeepthecutterin closedpositionduringoperation.Switchoffthepoweror disconnectthecutterbeforecleaning.Keepyourfingersaway fromcuttingedges!

- **Note:** The cutter must be enabled during Configuration in Setup Mode. For more information, see "Cutter" on page 50 and "PaperCutter" on page 69.

Integral Liner Takeup Kit

The integral liner takeup unit is an optional device for peel-off (self-strip) operation, which means the labels are separated from a liner (backing paper) after printing and the liner is wound upon an internal hub. The unit also includes a guide shaft. Peel-off operation cannot be combined with Quick-Load guides.

This is a factory-installed option only and is used to separate labels from the liner and wind up the spent liner inside the printer's media compartment. Labels, tickets, tags, etc. can be wound up inside the media compartment after printing by fitting a special guide to the front of the print unit.

The kit consists of a stepper motor that drives the liner drive roller in the print unit (fitted as standard) and a takeup hub in the media compartment. A guide shaft is fitted to the center section immediately behind the slack absorber. A guide plate is fitted at the rear of the media compartment and can be used to replace the standard tear bar on the print unit for batch takeup operation.

Operation and media loading are described in Chapter 3, "Media Load" on page 17.

Media Supply Hub

The rotating media supply hub is designed to fit media roll cores with an internal diameter of 38-40 mm (1.5 inch). The hub can be fitted in the same positions as the supply roll post, see Chapter 2. Being factory installed, the position of the media supply hub is not intended to be changed by the operator.

3-inch Adapter

The 3-inch/76 mm adapter is included in the package and makes it possible to use media rolls with 3 inch/76 mm inner diameter cardboard cores.

Theadapterispressedontothemediasupplyhubandheldin placebyascrew.Whenfittingtheadapters,makesurethatthe screwhitsaroundedplasticsurface,notametalleafspring.Not usedwithamediasupplyrollpost.

Label Taken Sensor

TheLabelTakenSensor(LTS)isaphotoelectricsensorfittedto thecentersectioninsidethefrontdoor.Itallowstheprinter’s firmwaretodetectifthelatestprintedlabel,ticket,ortaghas beenremovedbeforeprintinganothercopy.

Thelabeltakensensorisusuallyfactory-fitted,butisalso availableasakitforinstallationbyanauthorizedservice technician.Itcannotbefittedincombinationwithapaper cutter.

Thick Media Printhead

Inadditiontothestandardprinthead,whichisdesignedfora maximummediathicknessof175 µm(7mils)thereisan optionalprintheadforthickmedia(170to220 µm/6.6to8.7 mils).Theprintheadcaneasilybereplacedorexchangedbythe operatorasdescribedinChapter9, “Maintenance” onpage81.

Interface Boards

Anumberofinterfaceboardsareavailableforusewiththe EasyCoderPF4iprinter.Theinterfaceboardsareeitherfactory-fittedorcaneasilybefittedbyanauthorizedservicetechnician.

TheEasyCoderPF4iprintercanaccommodateoneEasyLAN interfaceboardplusoneotherinterfaceboard.

EasyLANboards:

- EasyLANEthernetinterface
- EasyLANWirelessinterface

Othercommunicationboards:

- ParallelInterfaceBoard(IEEE1284)

8 Troubleshooting

ThischapterdescribeshowtheIntermecReady-to-Work Indicatorandotherindicatorswork.Italsolistsvariouspossible casesofinferiorprintoutquality,describespossiblecauses,and suggestsremedies.

Intermec Ready-to-Work Indicator

Thereadinessoftheprinter,individuallyorasapartofa solution,isindicatedbytheblueIntermecReady-to-Work Indicator(RTW).

IftheRTWblinksorisswitchedoff,theprinterisnotready. Furtherinformationcanbeobtainedinthedisplaywindowby pressingtheikey.Incaseofseveralerrorsorsimilarconditions occurringsimultaneously,onlythemostsignificanterroris displayed.Oncethiserrorhasbeencleared,nextremainingerror isdisplayed.

Providedtheprinterisconnectedtoanetwork,allconditions thatpreventsprintingarereportedtotheEasyADCConsole. TheEasyADCConsoleisaPC-basedsoftwarewhichallowsa supervisortomonitorallconnecteddevicesthathavean IntermecReady-to-WorkIndicator,includinghandheld computers,accesspoints,andprinters.

Displayed Error Messages and LED Indicators

Error/Event
Operational
Outofpaper
Outoftransferribbon
Transferribbonis installed
Headlifted
Cuttererror1
Cuttererror2
Cuttererror3
Lsstoohigh
Lsstoolow
Testfeednotdone
Pressfeednotdone

Notanerror.

Displayed Error Messages and LED Indicators (continued)

Error/Event	
Pausemodeentered Setupmodeentered	
IPlinkerror	
IPconfigurationerror	
Printheadnotfound	
Rebooted Initializing	
Printercrash	
Printerturnedoff Maintenance	
Powersupplyover temperature	
Printheadhot	

Note1:Thisisonlyapplicableforprintersequippedwithan EasyLANinterface.

Note2:AprinterthatisequippedwithanEasyLANinterface, butisnotconnectedtoanetwork,willhaveablinkingRTW.To avoidthis,set“IPSELECTION”to“MANUAL”and“IP ADDRESS”to“0.0.0.0”.Thiswillindicatethatthelackof networkconnectionisnotanerror.

Note3:Notrapcanbesentwhenthiserror/eventoccurs.

Note4:Thiserrorindicatesthattheprinterhasnotreceivedan

IPaddress.ItisonlyapplicableforprinterswithIP
SELECTIONsettoDHCPand/orBOOTP.

Note5:Atmost,butnotall,printercrashes,theconsoleisreset. ThiswillmaketheRTWgooff.

Note6:Iftheprintheadtemperaturerisesabove100° C(212° F), anerroroccursandtheprintingwillbepauseduntilthe printheadhascooledoff.Meanwhile,theprinterisabletoreceive commandsanddatauntilthebufferisfilled.Theprintingis automaticallyresumedwhentheprintheadtemperaturehas reached85° C(185° F).

Troubleshooting

Overall Weak Printout

Possible Cause
Wrongmediagrade
Contrastvaluetoolow
Printheadpressuretoolow
Wornprinthead
Wrongprintheadvoltage

Printout Weaker On One Side

Possible Cause
Unevenprintheadpressure

Weak Spots

Possible Cause	
Foreignparticlesonmedia	
Media/ribbondon’ tmatch	
Poormediaorribbonquality	Selectabetter brandofmedia/ ribbon
Wornprinthead	
Wornplatenroller	

Overall Dark Printout

Possible Cause
Wrongmediagrade
Contrastvaluetoohigh
Printheadpressuretoohigh
Wrongprintheadvoltage

Excessive Bleeding

Possible Cause
Wrongmediagrade
Contrastvaluetoohigh
Printheadpressuretoohigh
Faultyenergycontrol

Dark Lines Along Media Path

Possible Cause
Foreignobjectsonprinthead

White Vertical Lines

Possible Cause
Printheaddirty
Missingprinthead

Large Part Of Dot Line Missing

Possible Cause
Failingprinthead
Failingstrobesignal

Printout Missing Along Inner Edge

Possible Cause
Badmediaalignment
Usingsmallcorewithsupply postinupperposition.
X-startparametervaluetoolowIncreasevalue

Transfer Ribbon Breaks

Possible Cause
Ribbonnotfittedcorrectly
Wrongmediagrade cleanprinthead
Badenergycontrol

Transfer Ribbon Wrinkles

Possible Cause
FaultyribbonbreakshaftadjustmentAdjustshaft.
Incorrectedgeguideadjustment
Printheadpressuretoostrong

No Thermal Transfer Printout

Possible Cause
Ink-coatedsideofribbonisnotfacing media

Media Feed Not Working Properly

Possible Cause
Changedmediacharacteristics
Wrong label rest dots parameterCheck/change
WrongMediaTypeparameter
WrongLSSposition

Media Feed Not Working Properly (continued)

Possible Cause
Dirtysensors
Faultysensors

Compressed Text Or Bar Code

Possible Cause
ToohighprintspeedforlargemediaReduceprintspeedChapter5 roll

9 Maintenance

Thischapterdescribeshowtheoperatorcanmaintaintheprinter. Regularmaintenanceisimportantfortheprintoutqualityand forthelifeoftheprinthead.Thechaptercoversthefollowing topics:

- Printheadcleaning
- Externalcleaning
- Cleaningthelabelstopsensor
- Printheadreplacement
- Mediajams

Whencleaningorreplacingtheprinthead,takeample precautionstoavoidelectrostaticdischarges.

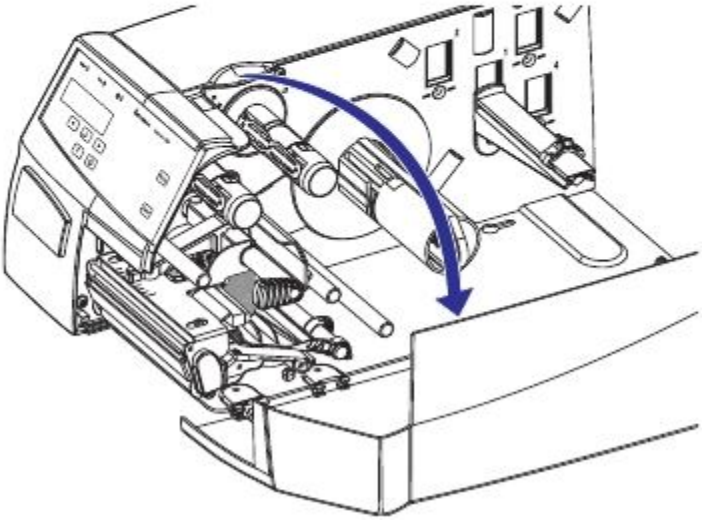
Printhead Cleaning

Cleaningtheprintheadonaregularbasisisimportantforthelife oftheprintheadandfortheprintoutquality.Youshouldclean theprintheadeachtimeyoureplacethemedia.Thissection describeshowtocleantheprintheadusingcleaningcards.If additionalcleaningisrequired,forexampleremovingadhesive residuefromtheplatenrollerortearbar,useacottonswab moistenedwithisopropylalcohol.

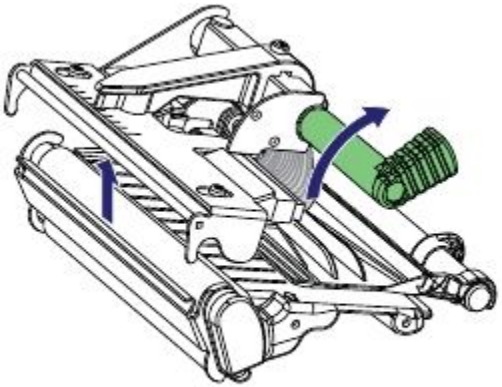
Isopropylalcohol[(CH-3)2CHOH;CAS67-63-0]isahighly flammable,moderatelytoxic,andmildlyirritatingsubstance.

To clean the printhead

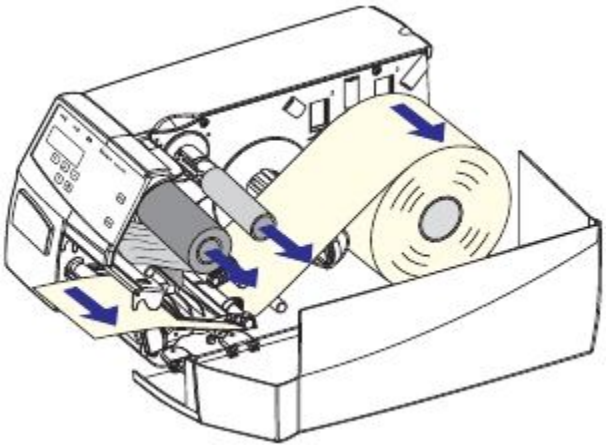
1Openthesidedoor.



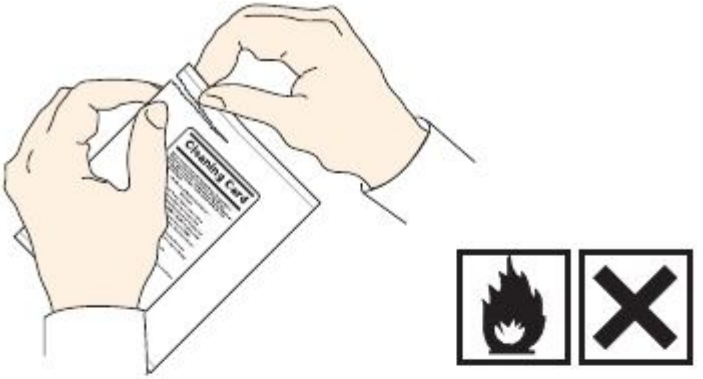
2Turntheprintheadliftlevercounterclockwisetoraisethe printhead.



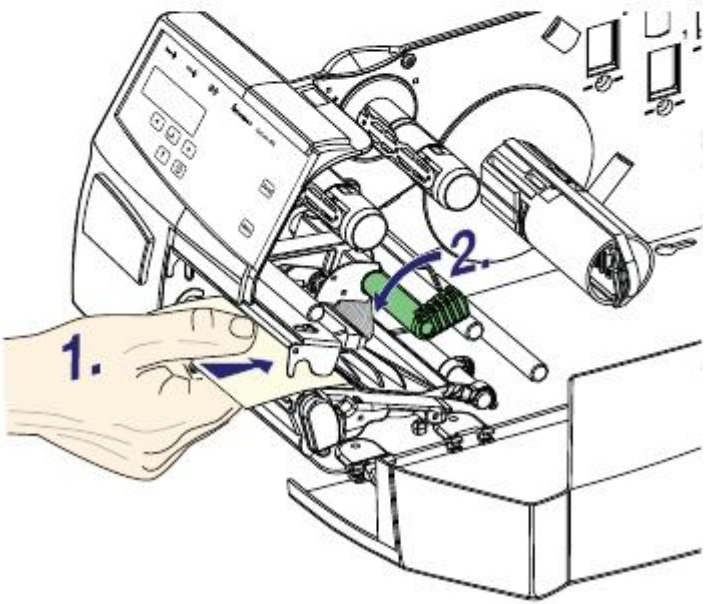
3Removeanymediaandtransferribbon.



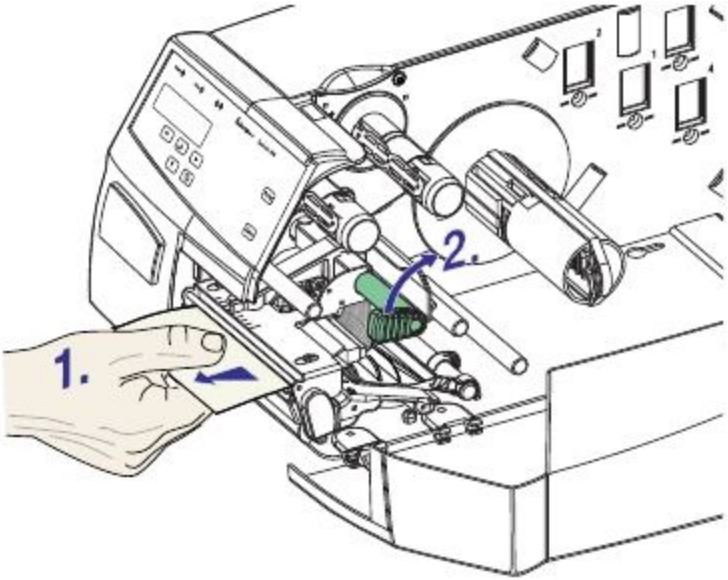
4 Open the cleaning card envelope and pull out the cleaning card. Read the warning text.



5 Insert most of the cleaning card under the printhead (1). Engage the printhead (2).

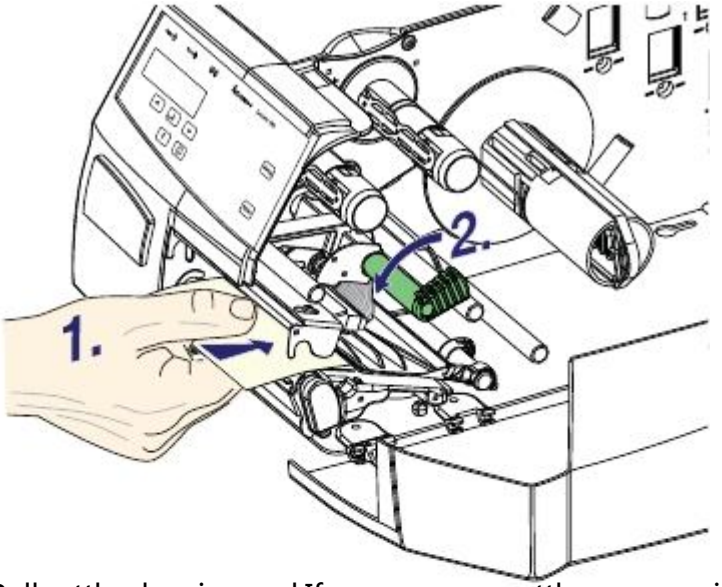


6Pulloutthecleaningcard(1)andraisetheprinthead(2).

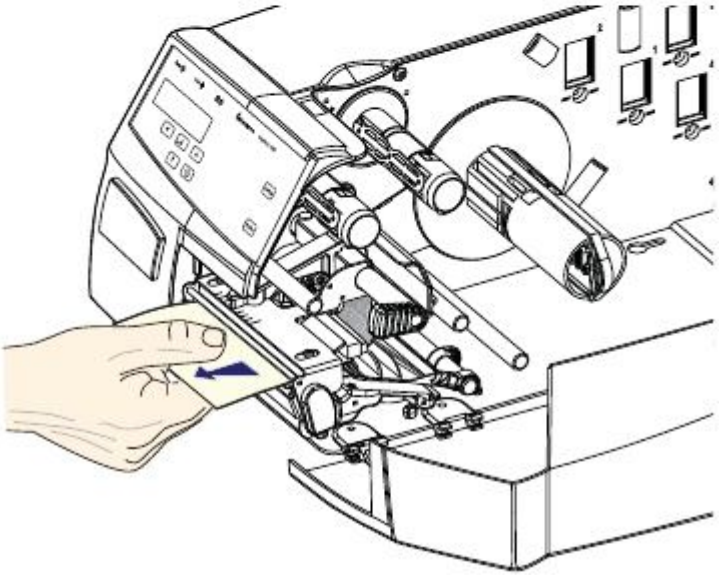


7Waitforapproximately30secondstoallowthecleaningfluid todissolvetheresidue.

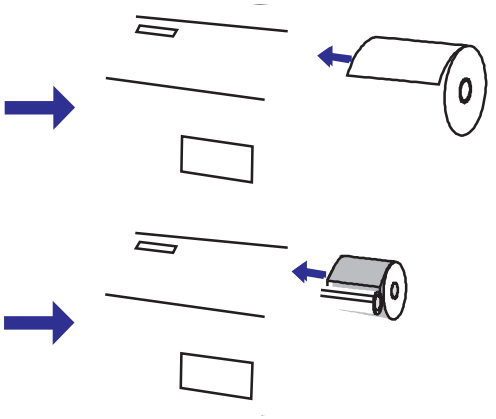
8Insertmostofthecleaningcardundertheprintheadagain (1).Engagetheprinthead(2).



9Pullouttthecleaningcard.Ifnecessary,repeattheprocesswith afreshcleaningcard.



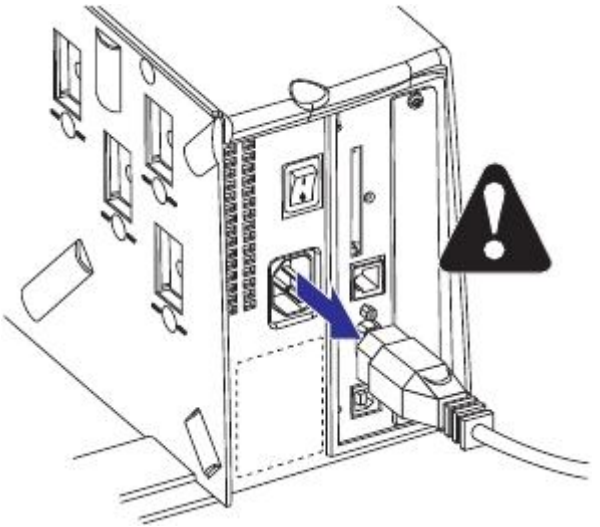
10 Allow the cleaned parts to dry completely before loading any media or ribbon.



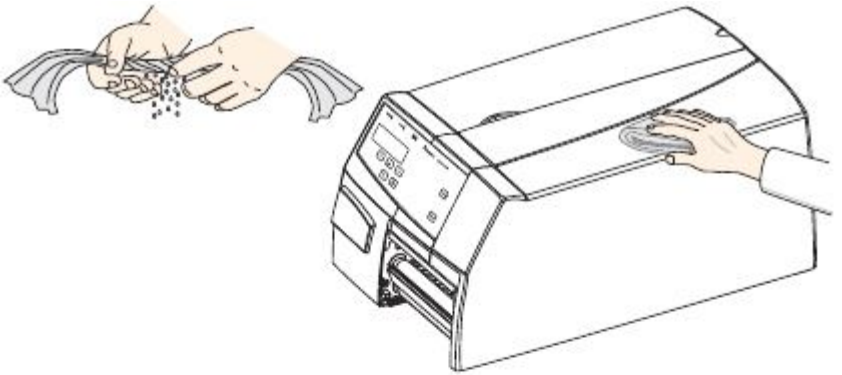
External Cleaning

To clean the exterior of the printer

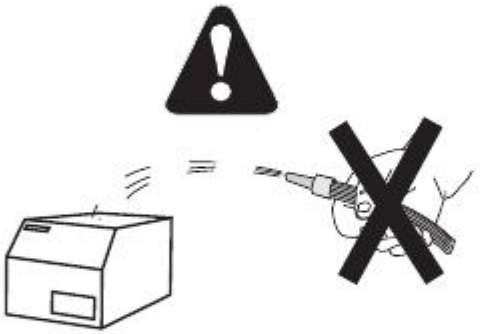
1 Always remove the power cord before cleaning!



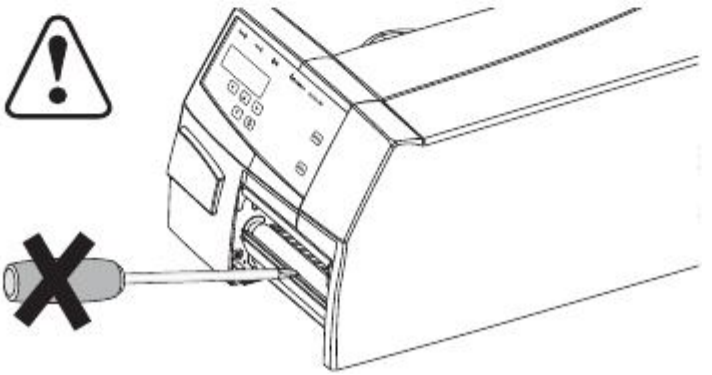
2Wipeexternalsurfaceswithasoftclothslightlymoistened withwateroramilddetergent.



3Neverspraytheprinter.Protectitfromwaterwhencleaning thepremises.



4Neveruseanysharptoolsforremovingstucklabels.The printheadandrollersaredelicate.



Cleaning the Media Guides

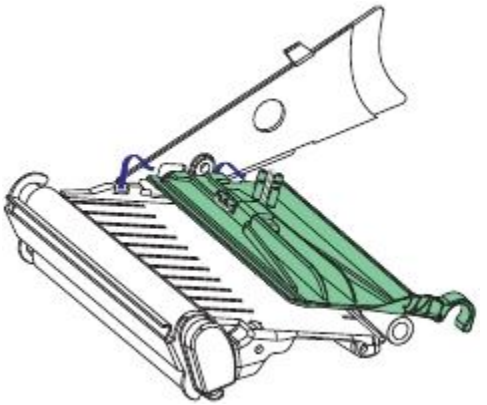
Thelabelstopsensor,whichcontrolsthemediafeed,ispartially enclosedbytwoplasticguides.Lightpassesthroughslots betweentheupperandlowerpartofthesensor.Ifthesareasare notclean,stucklabelsorotherobjectsmayblockthelightbeam andthelabelstopsensorwillnotfunction.

Iftheprinterstartstofeedoutlabelsinanunexpectedway, removetheguidesasdescribedbelowandcheckforanything blockingthebeamoflight,suchasdust,stucklabels,oradhesive residue.Ifnecessary,cleantheguidesusingacleaningcardora softclothsoakedwithisopropylalcohol.Donotuseanyother typeofchemicals.

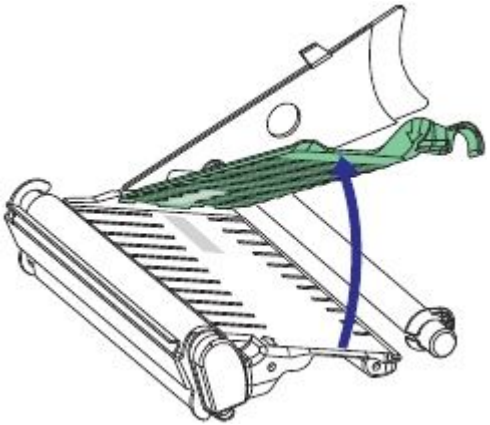
Isopropylalcohol[(CH-3)2CHOH;CAS67-63-0]isahighly flammable,moderatelytoxic,andmildlyirritatingsubstance.

To clean the Media Guides

1Pulltheupperguidestraightout.(Upperpartofprintunit omittedforbetterview.)



2Pressthesnap-lock,lifttheouterendofthelowerguideand pullitout.



3Checkforanythingblockingthebeamoflight,suchasdust, stucklabels,oradhesiveresidue.Ifnecessary,cleantheguides usingacleaningcardorasoftclothsoakedwithisopropyl alcohol.Donotuseanyothertypeofchemical.

Isopropylalcohol[(CH-3)2CHOH;CAS67-63-0]isahighly flammable,moderatelytoxic,andmildlyirritatingsubstance.

4Aftercleaning,reassembleinreverseorder.

Printhead Replacement

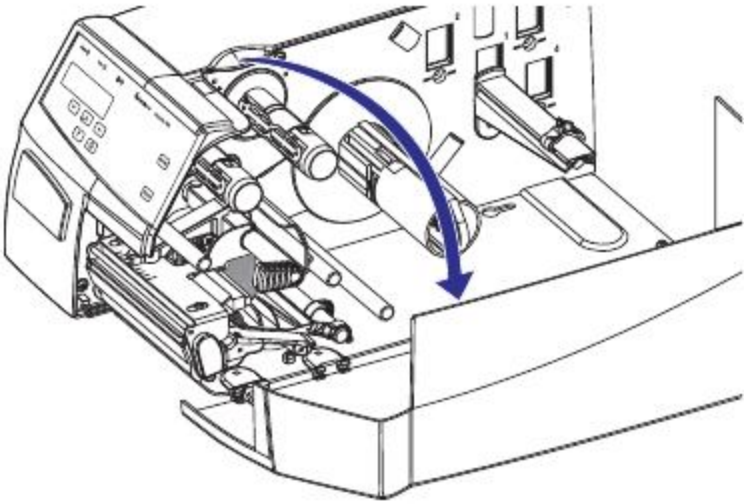
Theprintheadissubjecttowearbothfromthedirectthermal mediaortransferribbonandfromtherapidheatingandcooling processduringprinting.Thismeansthattheprintheadwill requireperiodicreplacement.

Timebetweenprintheadreplacementsdependsontheprint images,thetypeofdirectthermalmediaorribboninuse,the amountofenergytotheprinthead,theprintspeed,theambient temperature,andseveralotherfactors.

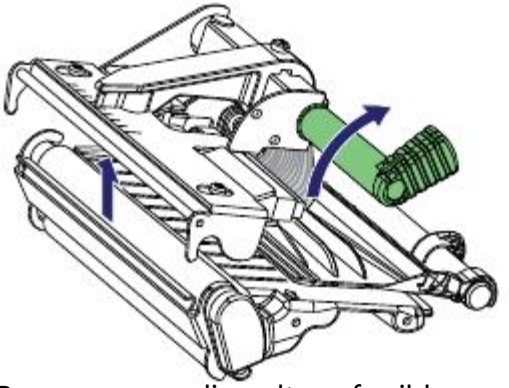
Whilereplacingtheprinthead,thepowermustbeoff.The firmwarewillnotdetectthenewprintheadresistanceand densityuntiltheprinterhasbeenrestarted.

To replace the printhead

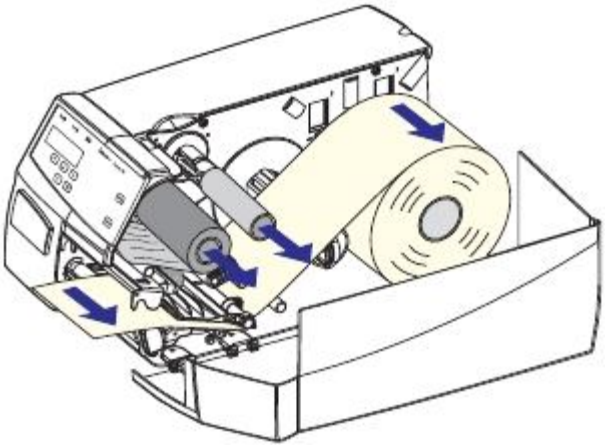
1Openthesidedoor.



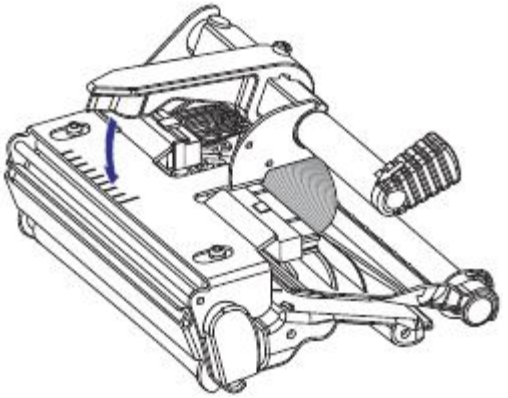
2Turntheprintheadliftlevercounter-clockwisetoraisethe printhead.



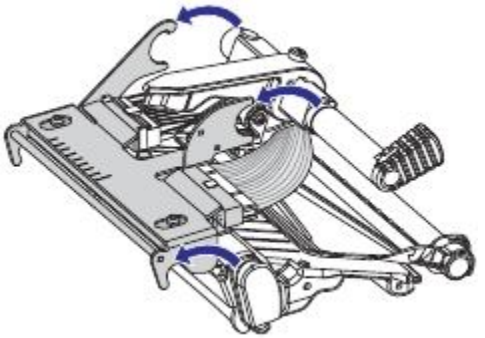
3Removeanymediaandtransferribbon.



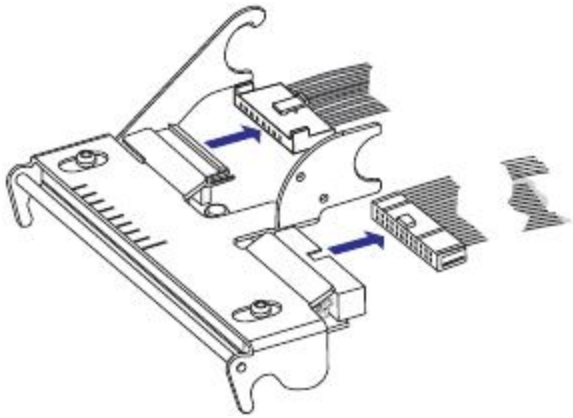
4Pulltheprintheadbracketawayfromthemagnetinthe pressurearm.



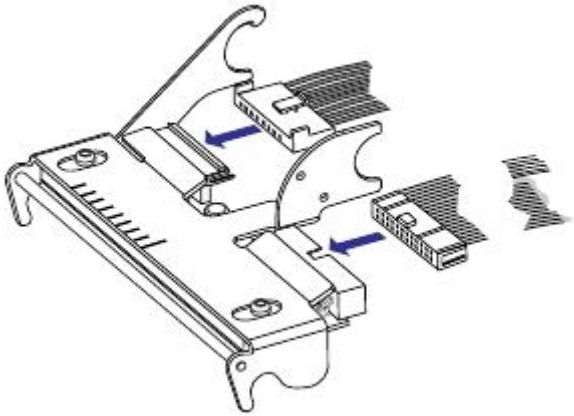
5Disconnectthehookedprintheadbracketfingersfromthe shaftandpulloutheprintheadasfarasthecablesallow.



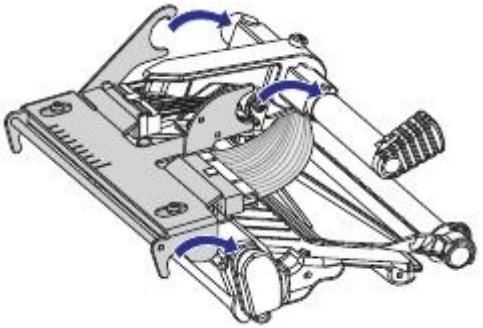
6Disconnectthecablesfromtheprinthead.Notethesnap-lock ontheinnerconnector.Pullontheconnectors,notonthe cables.



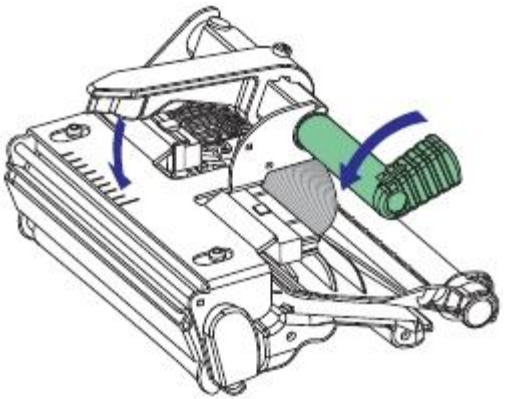
7Connectthetwocablestothereplacementprinthead.



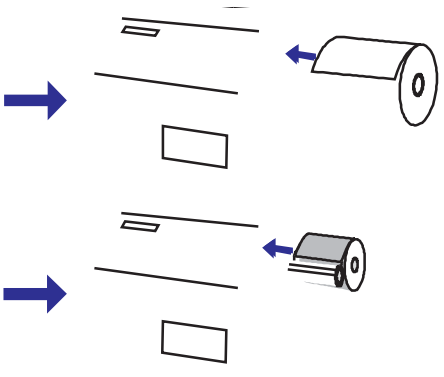
8 Fit the hooks of the printhead bracket fingers onto the head lift shaft. Make sure that the cables do not prevent the bracket fingers from being properly seated.



9 Close the printheads so the magnet engages the printhead bracket.



10 Load a new supply of media and ribbon as described earlier in this manual.



Media Jams

Shouldamediajamoccurintheprintmechanism,proceedthis waytoclearit.

To clear a media jam

1Alwaysswitchoffthepowerbeforestartingtoclearthe jammedmedia.

2Raisetheprintheadandpulloutthemedia.

3Ifthemediahasbeenwounduponorhasstucktotheplaten roller,carefullyremoveitbyhandwithoutusinganysharp toolsthatcandamagethedelicateplatenrollerorprinthead. Avoidrotatingtheplatenroller.

Ifyoumustpullawaythemediabyforcecausingthe platenrollertorotate,itisveryimportantthatthepower hasbeenoffforaminuteormore.Ifnot,theelectronics canbedamagedbeyondrepair.

4Cutoffanydamagedorwrinkledpart.

5Checkifthereisanyadhesivesomewhereintheprint mechanism.Ifthereis,removeitusingacleaningcardora cottonswabsoakedinisopropylalcohol.

Isopropylalcohol[(CH-3)2CHOH;CAS67-63-0]isa highlyflammable,moderatelytoxic,andmildlyirritating substance.

6ReloadthemediaasdescribedinChapter3.

7Switchonthepower.

8Readjustthemediafeedbyraisingandclosingtheprinthead andthenpressingthe**Feed/Pause**key.

10 Adjustments

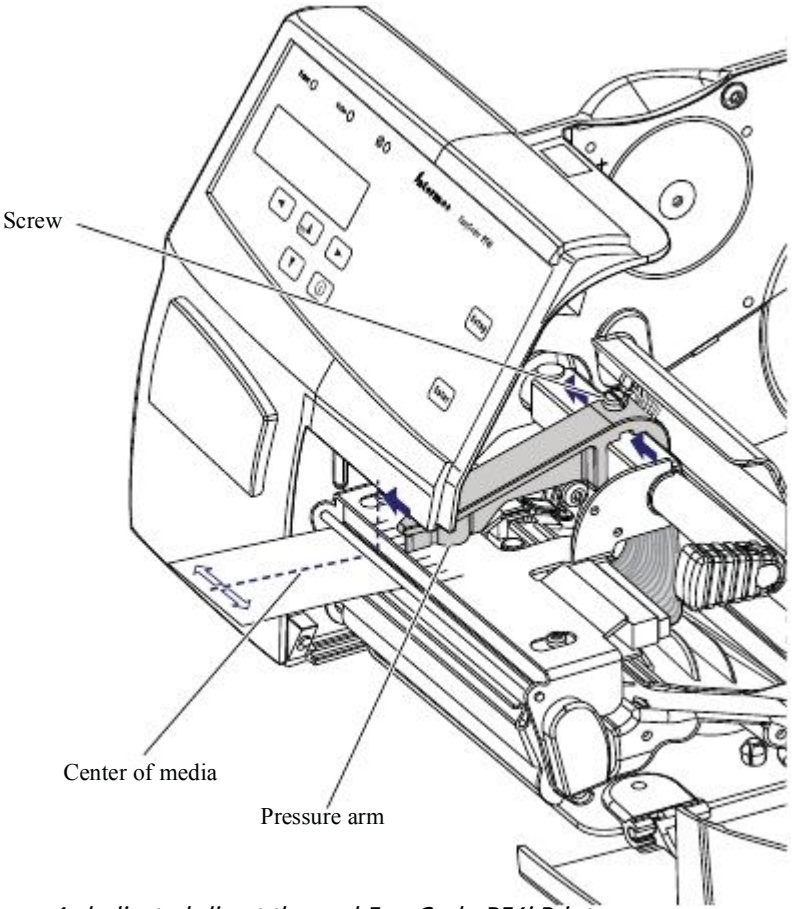
Thischapterdescribeshowtheoperatorcanadjusttheprinter.
Thechaptercoversthefollowingtopics:

- Narrowmediaadjustment
- Labelstopsensoradjustment
- Printheadpressureadjustment
- RibbonBreakshaftadjustment
- Quick-Loadguidesinstallation

Adjusting for Narrow Media

Theprinterisfactory-adjustedforfullsizemediawidth.When usingnarrowermedia,adjustthepressurearmsoitremains centeredonthemediaandappliespressureevenly.

Apoorlyadjustedpressurearmmaybedetectedbyaweaker printoutoneithersideofthemediapath.



A dedicated direct thermal EasyCode PF4i Printer

To adjust the pressure arm for narrow media

1Removetheribbon,ifany.

2Loosentheknobthatholdsthepressurearm.

3 Move the arm inwards or outwards until the arrow on the tip of the arm becomes centered on the media stock. Push at the part where the knob is situated, not at the tip. If the arm is hard to move, lift the printhead and pull the printhead bracket free from the magnetin the arm.

4 Lock the arm in the new, centered position by tightening the knob.

5 Re-adjust the edge guides.

6 Reload the ribbon, if any.

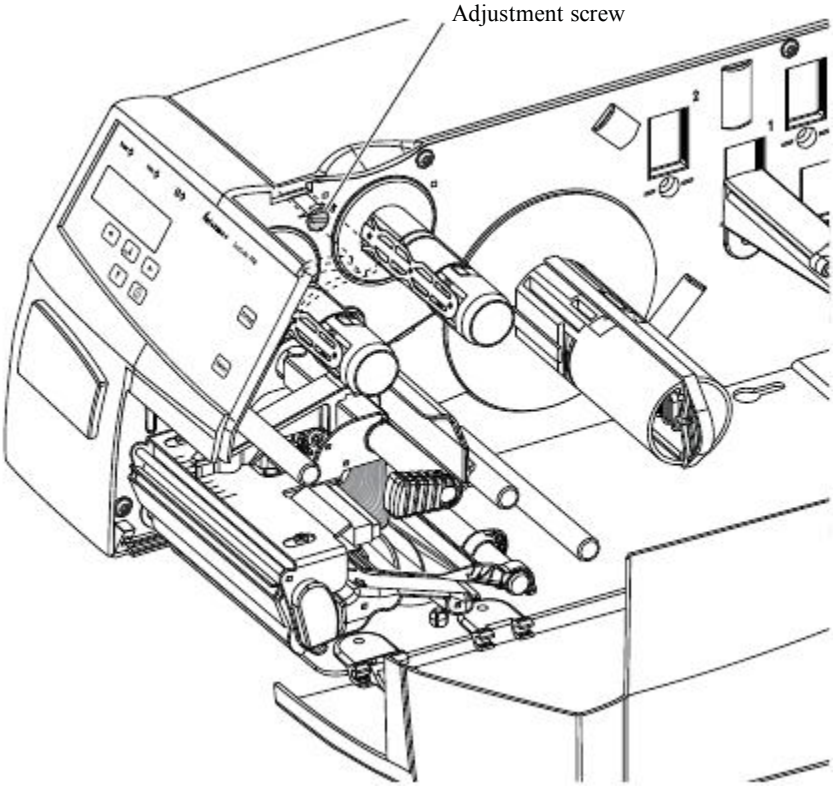
Adjusting Printhead Pressure

The pressure of the thermal printhead against the ribbon or direct thermal media is factory adjusted. However, the use of thicker or thinner media than normal could require the printhead pressure to be readjusted.

Using a straight-slot screwdriver, turn the head adjustment screw clockwise for more pressure (+) or counterclockwise for less pressure (-). Print a few labels, preferably Test labels, and check the printout. For help printing test labels, see "Testprint" on page 53. Increased pressure generally gives a darker printout and vice versa. Repeat until the desired result is obtained.

Do not use a higher printhead pressure than necessary. Unnecessary pressure may increase the wear of the printhead and shorten its life.

Toreturntothefactorysetting,tightenthescrew(+)asfarasit goesandthenloosenit(-)fourfullturns.Testwithapieceof mediaundertheprinthead.Youshouldbeabletopullitout withoutmorethanjustalittleresistance.



Printhead Pressure Adjustment Screw

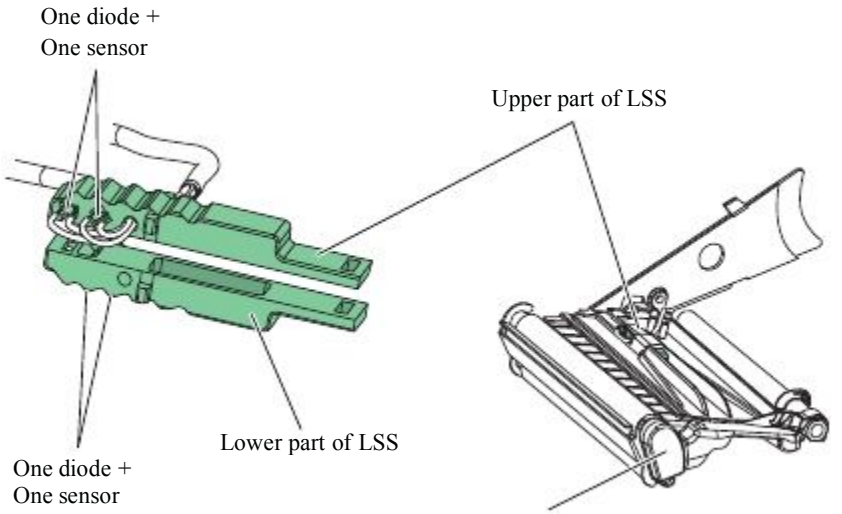
Adjusting the Label Stop Sensor

The label stop sensor (LSS) is a photoelectric sensor that controls the printer's media feed by detecting gaps between labels or slots or black marks in continuous stock, depending on the printer's setup in regard of media type. The LSS should be aligned with the gaps, slots, or black marks. If using irregularly shaped labels, align the LSS with the front tips of the labels.

The LSS can be moved laterally between 5 fixed positions. There is one part of the sensor on top of the upper media guide and another part underneath the lower guide. These must be adjusted individually to the same position. Using a small screwdriver, push the inwards as far as they go and then pull them out one at the time while counting the clicks from the snap-locks. A hole in the bottom plate facilitates adjustment of the lower sensor package.

The various detection points of the sensor in relation to the inner edge of the media areas follows:

One click out
Two clicks out
Three clicks out
Four clicks out
Five clicks out



Label Stop Sensor Parts and Location

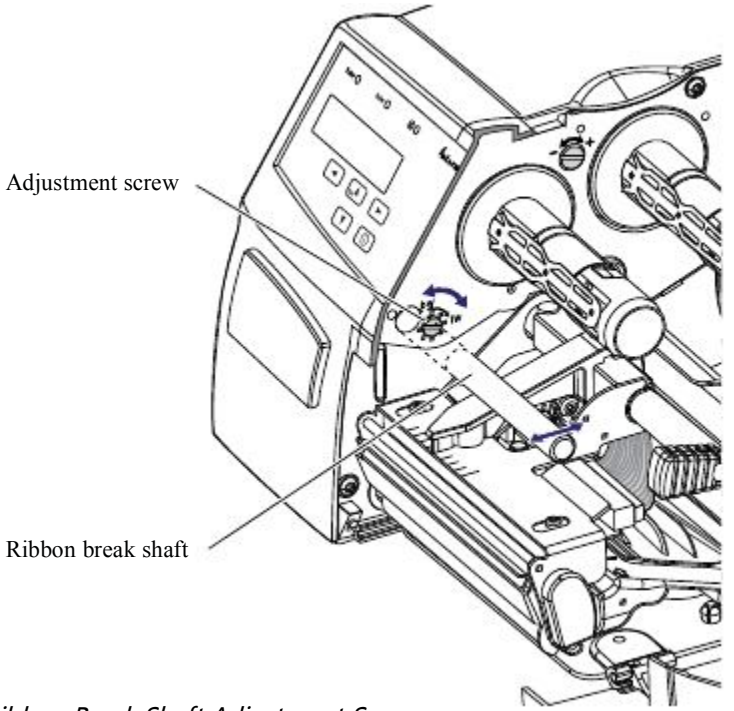
Adjusting the Ribbon Break Shaft

If ribbon wrinkling occurs, you may need to adjust the alignment of the front ribbon break shaft so that it runs parallel to the printhead and the ribbon supply and rewind hubs. The adjustment is done using a straight slot screw that is located immediately behind the front ribbon break shaft.

Caution

Before readjusting the break shaft, make sure that there is no other cause for the wrinkling of the ribbon. (See Chapter 8, "Troubleshooting" on page 73.)

- If the ribbon tends to slide outwards, turn the screw carefully clockwise (forwards) to move the outer end of the break shaft forward.
- If the ribbon tends to slide inwards, turn the screw carefully counterclockwise (backwards) to move the outer end of the break shaft backward.



Ribbon Break Shaft Adjustment Screw

Installing the Quick-Load Guides

TheQuick-Loadguidesmay,dependingonmodel,befactory-installedorbeenclosedintheboxforoptionalinstallationbytheuser.Theyreplacethestandardedgeguide.

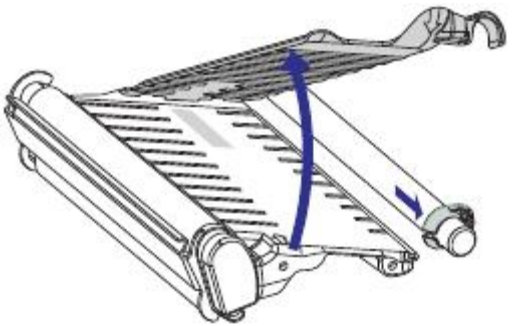
TherearetwotypesofQuick-LoadGuide.Thenarrowtypeisusedwithmediathatis40-114.3mm(1.57-4.5inches)wide,andthewidetypeisusedformediabetween80and114.3mm(3.15-4.5inches).Theinnerguideshouldbefittedflushtothecentersection,whereastheouteroftheguideisadjustableforvariousmediawidths.

TheQuick-Loadguidesfacilitatemedialoadfrombehindtheprintmechanismandhelpguidingthemediawhenusinganexternalsupply.RefertoChapter3, “Tear-OffwithQuick-Load(StraightThrough)” onpage23forloadinginstructions.

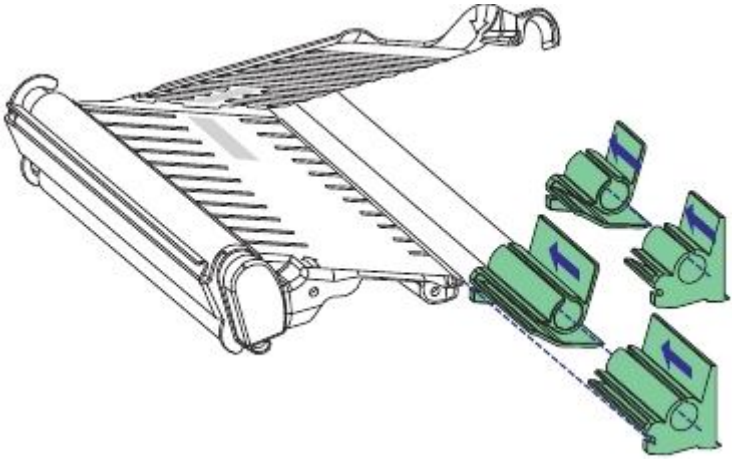
Quick-Loadguidescannotbeusedforpeel-offoperation.Thestandardring-shapededgeguideisusedwhenyouwanttoloadthemediafromthesideratherthanfrombehindandisalsousedforpeel-offoperation.

To install the Quick-Load Guides

1 Liftuptheuppermediaguideandpulloutthegreenedgeguide.Donotdiscardtheedgeguide.



2Pressthewideornarrow Quick-Load guidesontotheshaftas illustrated, makingsurethatthenotchesfittherailattherear ofthelowermediaguide.



A Technical Data

This appendix lists the technical data for the printer. Please note that Intermec reserves the right to change this information without prior notice and that this information does not represent a commitment on the part of Intermec.

Printing

PrintTechnique
PrintheadResolution
PrintSpeed(variable)
PrintWidth(max)
PrintLength(max)
MediaWidth(min/max) StandardEdgeGuides
MediaWidth(min/max) Quick-LoadGuides
MediaRollDiameter(max)
MediaRollCoreDiameter
RibbonWidth(min/max)
RibbonRollDiameter(outer), max.
RibbonRollCoreDiameter (inner)
PrintDirections

Modes of Operation

Tear-Off(Straight-through)
Cut-Off
Peel-Off(Self-strip)

Firmware

OperatingSystem
SmoothFonts
Built-inbarcodesymbologies38

Physical Measurements

Dimensions(W×L×H) Withlongsidedoor	
Dimensions(W×L×H) Withpapercutterinstalled	
Dimensions(W×L×H) With8-inchMegatopinstalled	
Weight(excludingmedia)	
AmbientOperatingTemperature	
Humidity	

Electronics

Microprocessor	
On-boardFlashSIMMs	
On-boardSDRAMSIMM	Standard8MB

Power Supply

ACVoltage	
PFCRegulation	
PowerConsumption	

Sensors

LabelGap/BlackMark/OutofMediaYes	Fivefixedpositions.
PrintheadLifted	
RibbonEnd/RibbonLow	Thermaltransfermodelonly.

Controls

IndicatorLamps	
Display	

Controls

Keyboard
Feed/Pausebutton
Beeper

Data Interfaces

Serial
ConnectionforOptional InterfaceBoards
MemoryCardAdapter

Accessories and Options

ThickMediaPrinthead
IntegralSelf-stripUnitwithLiner Takeup
RotatingMediaSupplyHub
3-inchAdapterforMediaSupplyHub
Cutter
ShortSideDoor
LongSideDoor
LongSideDoorwith8-inchMegatop
LabelTakenSensorOption
RS-232CableOption
ParallelInterfaceCable
ParallelInterfaceBoardOption
EasyLANEthernetInterface
EasyLANWirelessInterface
CompactFlashCards

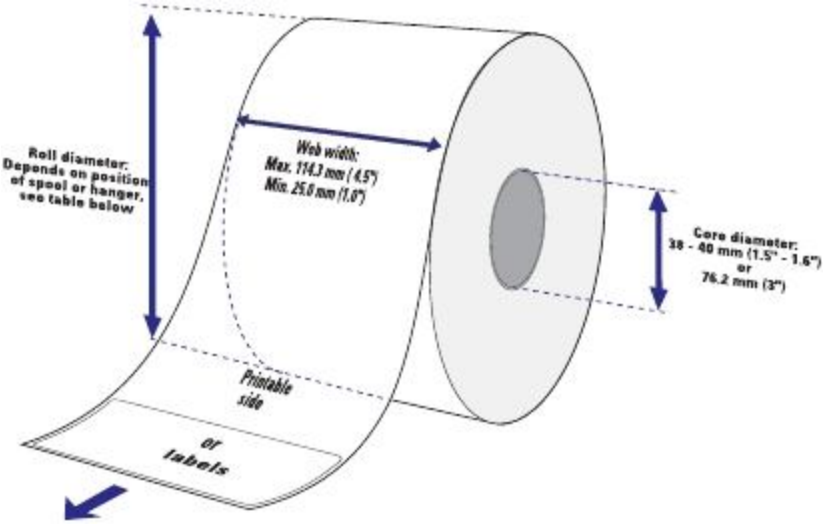
Note1:Themaximumprintlengthisalsorestrictedbythe amountoffreeSDRAMmemory.

Note2:Dependingonmodel,theprintermaybedeliveredwith oneofthreetypesofdoors.

B Media Specifications

Thisappendixspecifiesthephysicalmeasuresforvarioustypesof media.

Media Roll Size



Core

Diameter(A),standard:38-40mm(1.5inches),withadapter:76.2mm(3inches)

Width:Mustnotprotrudeoutsidethemedia.

Caution

Themediamustbewoundupontheinsuchawaythattheprintercanpulltheendfree.

Media

Diameter:

- Position1
- Position2
- Position3

Maximum:114.3mm/4.50inches
Minimum(standard):25mm/1.00inches
Minimum(Quick-Load):40mm/1.57inches

Therecommendedmediathicknessis175 µm(7mils)withthe standardprintheador220 µm(8.7mils)withthespecialthick mediaprinthead. Ifthickermediaisused,printqualitymaybe reduced.Mediastiffnessmustbebalancedagainstthicknessto maintainprintquality.Mediarollstobeloadedinsidetheprinter shouldbewoundwiththeprintablesidefacingoutwards.

Themediasupplymustnotbeexposedtodust,sand,orgrit.Any hardparticles,howeversmall,candamagetheprinthead.

Media

Self-Adhesive Strip (Continuous Stock)

(a)ExternalMediaWidth (includingliner)

Maximum:114.3mm(4.5 inches)
Minimum(standard):25mm (1.00inches)
Minimum(narrowQuick-Load):40mm(1.57inches)
Minimum(wideQuick-Load):

(b)LinerWidth

Thelinermustnotextendmore thanatotalof1.6mm(0.06 inch)pasttheedgeoftheface materialandshouldprotrude equallyonbothsides.

(c)InternalMediaWidth(excludingbacking)

Maximum:112.7mm(4.43inches)
Minimum:23.8mm(0.94inches)

MediaTypeSetup:ContinuousStock

Self-Adhesive Labels (Gap Stock)

a

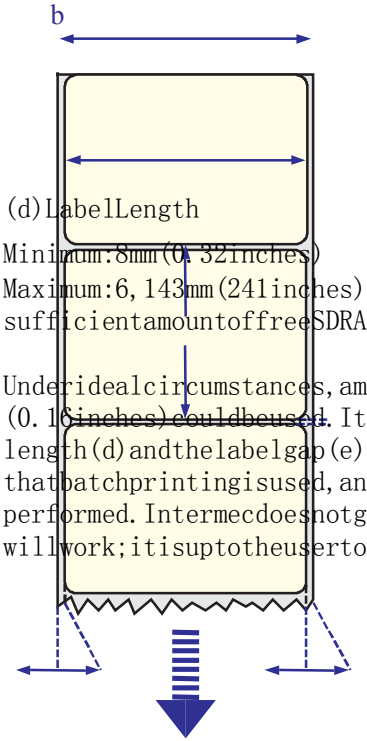
c

d

Quick-Load):
80mm(3.15inches)

(b)LinerWidth

Thelinermustnotextend



(d)LabelLength

Minimum:8mm(0.32inches)
Maximum:6,143mm(241inches),providedthatthereisa
sufficientamountoffreeSDRAMmemory

Underidealcircumstances,aminimumlabellengthof4mm
(0.16inches)couldbeused.Itrequiresthatthesumofthelabel
length(d)andthelabelgap(e)islargerthan7mm(0.28inches),
thatbatchprintingisused,andthatnopullbackofthemediais
performed.Intermecdoesnotguaranteethatsuchshortlabels
willwork;itisuptotheusertotestit.

(e)LabelGap

Recommended:3.0mm(0.12inches)
Minimum:1.20mm(0.05inches)
Maximum:21.3mm(0.83inches)

TheLabelStopSensormustbeabletodetecttheextremefront edgesofthelabels.Formoreinformation,see “AdjustingtheLabelStopSensor” onpage101.

MediaTypeSetup:GapStock

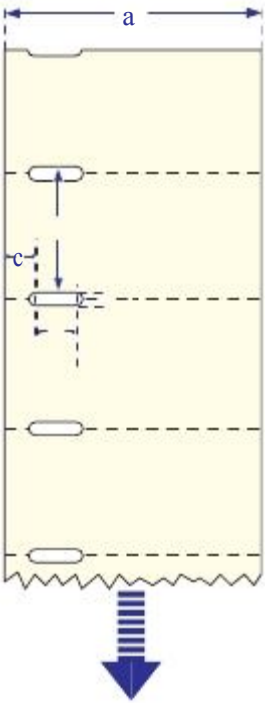
Non-Adhesive Strip (Continuous Stock)

(a)MediaWidth

Maximum:114.3mm(4.5inches)
Minimum(standard):25mm(1.00 inches)
Minimum(narrowQuick-Load):40 mm(1.57inches)
Minimum(wideQuick-Load):80 mm(3.15inches)

MediaTypeSetup:ContinuousStock

Tickets With Gaps (Gap Stock)



willwork;itisuptotheusertotestit.

(c)LSSDetectionPosition:Fivepositions,see “LabelTaken Sensor” onpage71.

(d)DetectionLength

Thelengthofthedetectionslit(excludingcornerradii)mustbea minimumof2.5mm(0.10inches)toeitherside(rightorleft)of thelabelstopsensordetectionposition.

(e)DetectionHeight

Recommended:1.6mm(0.06inches)
Minimum:1.27mm(0.05inches)
Maximum:21.3mm(0.83inches)

MediaTypeSetup:GapStock

Note: Handleperforatedmediacarefullytoavoidripsorbreaksalong theperforations.Brokenorrippedperforations,particularlyatthe edges,maycausethemediatobreakormisfeedduringprinting.

Tickets With Black Mark (Mark Stock)

Note: Preprintthatmayinterferewiththedetectionoftheblackmark shouldbeavoided.

Note: Theblackmarkshouldbenon-reflectivecarbonblackona whitishbackground.

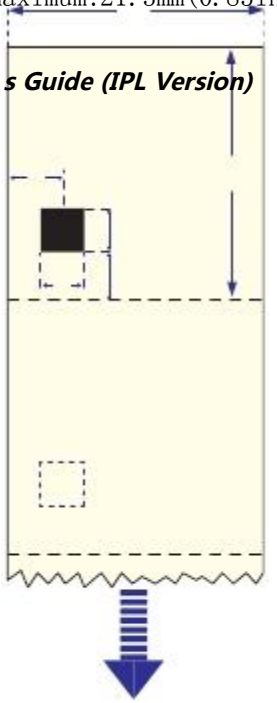
a

Minimum:20.0mm(0.8inches)

TICKETS WITH MARKS

(e)BlackMarkLength

Common:12.5mm(0.5inches)
Minimum:5.0mm(0.20inches)
Maximum:21.3mm(0.83inches)



(f)BlackMarkY-Position

Theblackmarkshouldbeasclosetothefrontedgeoftheticket aspossible,eitheronthetoporonthebackofthemedia.

MediaTypeSetup:MarkStock

- **Note:**Handleperforatedmediacarefullytoavoidripsorbreaksalong theperforations.Brokenorrippedperforations,particularlyatthe edges,maycausethemediatobreakormisfeedduringprinting.

C Interfaces

Thisappendixdescribestheinterfaceconnectorsfoundonthe printer’srearplate.Itcoversthefollowingtopics:

- RS-232interface
- Optionalinterfaces

RS-232 Interface

Protocol For The Default Setup

Tochangetheinterfacesettings,seeChapter5, “SettingUpthe Printer” onpage49

Baudrate:9600
Characterlength:8bits
Parity:None
Stopbits:1
RTS/CTS:Disabled
ENQ/ACK:Disabled
XON/XOFF:Disabled(bothways)
NewLine:CR/LF

RS-232

SIgnals On Printer’s Serial Port

DB-9

1

2

3

4

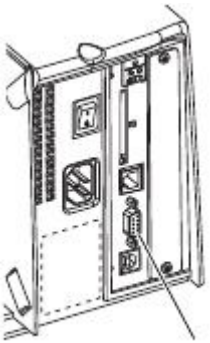
5

6

7

8

9



*Theexternal+5Vislimitedto500mAandisautomatically switchedoffatoverload.

Interface Cable

Computerend:Dependsoncomputermodel

Printerend:DB-9plug

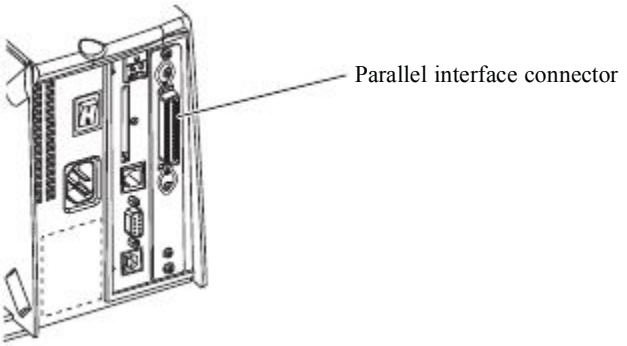
Optional Interfaces

Theprintercanoptionallybefittedwithan IEEE1284Parallel InterfaceBoardattheright-handsideoftheprinter’srearplate.

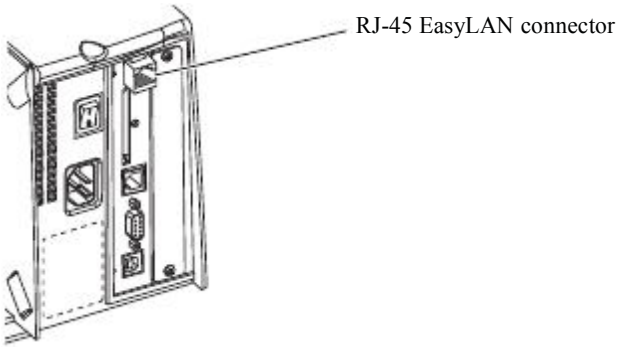
Theprintercanalsobefittedwithoneofthefollowing EasyLAN interfaceboardsforconnectiontoaLocalAreaNetwork(LAN).

- EasyLANEthernetInterface
- EasyLANWirelessInterface

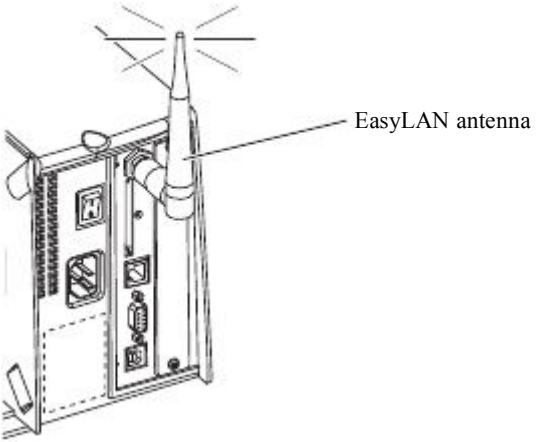
IEEE 1284 Parallel Interface Board



EasyLAN Ethernet Interface



EasyLAN Wireless Interface



D Media Sensitivity Number

Thisappendixdescribeshowtodeterminethecorrect Media SensitivityNumber(MSN)forvarioustypesofdirectthermal mediaorthermaltransferribbon.Italsoincludesinstructionson howtodeterminetheprinter’scurrentmediasensitivitysetting andhowtoadjustit.

About the Media Sensitivity Number (MSN)

The media sensitivity number (MSN) specifies the amount of heat the printhead needs to image a label. The amount of heat required is unique due to different chemistries and manufacturing processes. Setting the media sensitivity correctly optimizes both print quality and print speed.

Intermec has determined MSNs that produce the highest possible print quality for Intermec media and ribbon combinations on Intermec printers.

Determining the Current Media Sensitivity Setting

You can use Setup mode to print out a configuration label that includes the printer's current media sensitivity setting. For instructions, see "Test/Service" on page 64.

By default, the MSN for direct thermal media is 420 and 567 for thermal transfer media.

Changing the Current Media Sensitivity Setting

Use the Setup Mode, PrintSet, third-party software, or the Intermec printer language (IPL) command set to change the printer's media sensitivity number. The following example sets the MSN to 567 using the IPL command set.

To set the sensitivity rating

1. Find the three-digit sensitivity rating.
2. At the DOS prompt, type the following command and press Enter:

   ```
   MODE COM1 96,E,7,1,N
   ```

3. Type the following command lines and press Enter:

   ```
   COPY CON COM1
   <STX><SI>g1,567<ETX>^Z
   ```

EasyCoder PF4i User’s Guide (IPL Version)

Determining the MSN for Intermec-Approved Media and Ribbons

To determine an exact media sensitivity number, obtain the part number of your media and/or ribbon and call 1-800-755-5505, press 1 and then 1. The part number may be printed on the outside of the box carton.

Both the thermal transfer media and ribbon have a sensitivity number. To determine the MSN, combine the digits. Note that "combine" does not mean "add".

Media or Ribbon	
Thermal transfer media	56*
Thermal transfer ribbon	5*7

567

number.

Determining the MSN for Other Media and Ribbons

If you are not using Intermec-approved media and ribbon, you can still achieve good print quality by setting an approximate media sensitivity number.

If your media is not listed in the table below, but a similar media is, use the approximate sensitivity level listed in the first column to achieve acceptable print quality. For example: 800, 700, 100.

If you cannot determine an approximate sensitivity level, start with the highest setting (800 for thermal transfer and 700 for direct thermal) and work your way down until you achieve acceptable print quality. You can also use PrintSet's Print Quality Wizard to help achieve acceptable print quality.

Media Sensitivity Numbers for Intermec-Approved Media and Ribbons

MSNsforpopularIntermec-approvedmediaandribbons.

Direct Thermal Media Sensitivity Settings

Sensitivity Level
400SeriesMediumSensitivity
100SeriesLowSensitivity

Thermal Transfer Media and Ribbon Sensitivity Settings

Sensitivity Level
800SeriesHighSensitivity(Paper)864
600SeriesMediumSensitivity (Synthetic)
500SeriesMediumSensitivity (Paper)
300SeriesLowSensitivity (Synthetic)

Worldwide Headquarters
6001 36th Avenue West
Everett, Washington 98203
U.S.A.
tel 425.348.2600
fax 425.355.9551
www.intermec.com

EasyCoder PF4i Bar Code Label Printer

934-027-001

P/N 934-027-001